BY ORDER OF THE COMMANDER, PACIFIC AIR FORCES

PACAF INSTRUCTION 11-301(cc)
10 OCTOBER 1995







COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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OPR: HQ PACAF/DOTT (CMSgt Gary Win-

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Supersedes PACAFR 55-7, 10 June 1991

Certified by: HQ PACAF/DOT (Lt Col Bruce T.

Hopkin) Pages: 96

Distribution: F

This instruction establishes and defines the Life Support equipment and continuation training programs for assigned/attached PACAF flying units, personnel assigned/attached to PACAF for flying, and other aircrew members flying PACAF aircraft. Amplifies policies and procedures contained in AFI 36-2201, AFI 11-301 and other USAF life support directives. Clarifies responsibilities, standardizes equipment control procedures, defines general equipment maintenance/inspection requirements, establishes security procedures and prescribes minimum equipment requirements for the PACAF Life Support sections and aircrews. It implements AFPD 11-3, Life Support; AFI 11-301, Life Support Program; and AFI 36-2209, Survival and Code of Conduct Training. Unless otherwise noted, this instruction is applicable to Air National Guard (ANG) units in the PACAF theater.

SUMMARY OF REVISIONS

*This instruction changes to PACAFI 11-301 and replaces PACAFR 55-7. It amplifies AFI 11-301 and further defines Life Support requirements. Training requirements have been redefined and intervals adapted to Air Force requirements. Chemical warfare defense is rewritten to include AERP system and COMBAT EDGE has been added to requirement. All new equipment in Life Support inventory has been added. Requirement for Life Support to inspect and maintain Night Vision Systems (NVG) has been added. Anti-G suit inspection cycles have been amended. Realignment of paragraph numbering from 5.2.1 - 5.2.4.15., 5.6.8. - 5.6.10.3., 5.17.5.2., and 5.20.2. - 5.20.4.4.1. New or revised material is indicated by a BAR to the right of the paragraph.

LIFE SUPPORT PROGRAM

- **1.1. General.** This instruction establishes minimum program requirements and outlines fundamentals, administrative, and managerial requirements for all PACAF life support organizations.
- **1.2. Supplements.** PACAF units will supplement this regulation if required. Supplements should address missions peculiar to unit peacetime operations and actions to mobilize, deploy and operate during wartime contingencies. Submit proposed supplements to HQ PACAF/DOTT for approval prior to publication. After publication, forward one copy to HQ PACAF/ DOTT. ANG units will submit their proposed supplements through command channels to ANGRC/DOS with copies to this headquarters.

1.3. Terms/Abbreviations:

- 1.3.1. ACCA. Aircrew Contamination Control Area.
- 1.3.2. PAM. Primary Aircrew Member. Any person, rated or non-rated required on the aircraft to accomplish the flying mission.
- 1.3.3. OSC. Operational Support Crewmember.
 - 1.3.3.1. A person assigned and performing duty in a UMD "Z" prefix position identified and authorized by AFCAT 36-2223.
 - 1.3.3.2. Personnel on flying status but not occupying a UMD "Z" prefix position.
 - 1.3.3.3. AECM. Aeromedical Evacuation Crew Members. Qualified flight nurses, aeromedical evacuation technicians, student trainees, and Aeromedical Evacuation Operations Officers (AEOO) performing duties.
- 1.3.4. Passenger. Individual aboard aircraft for the purpose of transportation.
- 1.3.5. Overwater Flight. Any flight taking off or landing over water, exceeding power-off glide or auto-rotational distance from land.
- 1.3.6. Arctic Flight. Any flight conducted above the 50th parallel of north latitude.
- 1.3.7. ACD. Aircrew Chemical Defense.
- 1.3.8. Desolate Terrain Flight. Any flight conducted over uninhabited areas (excluding the CONUS) exceeding one hour.
- 1.3.9. Life Support Equipment (LSE). The term "Life Support Equipment" encompasses all life support equipment that is part of the 412A life support system or as designated by HQ PACAF/DOTT.
- 1.3.10. Weapon System Team Chief (WSTC). Gives guidance on a weapon system or training area.

1.4. Communications:

1.4.1. Telephone. Use to clarify directives and procedures when an immediate response is required. Direct communication with air logistics centers or depots is not authorized without prior approval/coordination with HQ PACAF/DOTT. PACAF gained ANG life support units will route all communications through their chain of command and info HQ PACAF/DOTT.

- 1.4.2. Messages. When sending messages requiring an action by higher headquarters, provide information copies to all command agencies involved. Forward information copies of all life support related Product Quality Deficiency Reports (PQDRs) correspondence to HQ PACAF/DOTT. ANG units will send information copies to their respective chain of command.
- 1.4.3. E-Mail Procedures. Units should pursue permanent hook-up to Defense Switching Network (DSN) or Internet computer terminals to facilitate E-mail correspondence with HQ PACAF/DOTT. HQ PACAF/DOTT E-mail address is DOTT_WINCHESTER@CIDSS.AF.MIL or DOTT_LOVING@CIDSS.AF. MIL. Use E-Mail to forward communication between PACAF life support sections and HQ when response is not of a critical nature or when an immediate response is required.

PROGRAM ADMINISTRATION

- **2.1. General.** This chapter outlines core management requirements for administering PACAF life support programs.
- **2.2. Organization.** Life support is a staff function of HQ PACAF/DOT and the Air Operations Division, and of comparable staff agencies in PACAF wings, groups and squadrons. HQ PACAF/DOTT is responsible for the overall management of life support operations IAW AFPD 11-3 and AFI 11-301. ANGRC/DOS is responsible for the overall management of life support operations of PACAF ANG units. For everyday operational purposes, HQ PACAF gained ANG units will report directly to HQ PACAF/DOTT.
- **2.3. PACAF Life Support Mission.** The mission of the PACAF Life Support program is to provide quality life support equipment (LSE) and services for all aircrews, passengers, and aircraft during peacetime and wartime operations and to provide highly effective aircrew survival continuation training programs.
- **2.4. PACAF Life Support Key Processes.** The core programs to be established at all levels consist of: Equipment Maintenance (Chap 5 and applicable TOs), Aircrew Training (Chap 6), and Contingency Operations (Chap 7). Publication/TO familiarization, technician training, self assessment, and quality assurance will be implemented as follows:
 - 2.4.1. Publications/Technical Order (TO) Familiarization. Recommended technical orders and publications are listed in Attachments 1 and 2 of this regulation. Life support personnel will be knowledgeable of the contents and issues addressed in publications and TOs. A publications/TO familiarization program will be established to ensure prompt dissemination of task essential information. This program should also include message traffic, IG crossfeed, etc.
 - 2.4.1.1. HQ PACAF/DOTT is responsible for periodically publishing guidance/direction concerning MAJCOM options indicated in applicable life support related TOs. Wings will implement these requirements as appropriate.
 - 2.4.1.2. Proposed changes to Air Force TOs (AFTO Forms 22) and suggestions (AF Forms 1000) affecting life support equipment will be forwarded to HQ PACAF/DOTT IAW TO 00-5-1 and AFI 38-401, The Air Force Suggestion Program. OSS life support superintendent as the functional experts, will evaluate AFTO Forms 22 and AF Forms 1000 dealing with life support related issues. Additionally, they will ensure coordination between life support and survival equipment superintendents when applicable.
 - 2.4.1.3. The life support section will maintain a current file of applicable technical orders.
 - 2.4.1.4. Checklists. Maintain equipment checklists and work cards IAW TO 00-5-1. The OSS superintendent will review and forward local prepared checklist to the appropriate offices for approval in accordance TO 00-5-1.
 - 2.4.2. Technician Training. All units will establish an initial and recurring training program for AFSC 1T1X1 and 1T0X1 personnel. Upon assignment to a PACAF life support section, all technicians will be initially certified on required shop tasks. Annual recertification will be accomplished for 5/7-level personnel. Maintain OJT records IAW AFI 36-2201.

- 2.4.2.1. Major shop tasks and annual recertifications (biennial recertifications for ANG life support technicians) will be annotated in the individual's AF Form 623 (On-The-Job Training Record). Documentation will be standardized at the wing level and may use AF Forms 797 (Job Qualification Standard Continuation/Command JQS), 1098 (Special Task Certification and Recurring Training Sheet), or an equivalent computer generated form.
- 2.4.2.2. An overall "snapshot" tour for life support officers and new technicians is very helpful in providing a basic understanding of life support and how base agencies integrate with the life support function. As a training tool, units should arrange for Life Support Officers (LSOs) and technicians to attend a one-time orientation session with appropriate base agencies such as the local survival equipment shop, egress systems shop, etc. Recommended emphasis should include inspection, care, and handling of personnel parachutes, flotation equipment, automatic releases, procedures for locating and terminating false beacon transmissions, etc.
- 2.4.2.3. Life Support Annual Chemical Defense Task Qualification Training (CDTQT) will be performed by all life support technicians (ANG personnel biennial requirement). Ensure all assigned life support personnel demonstrate proficiency in major tasks while wearing the chemical defense ground ensemble. Tasks should emphasize aircrew CCA processing duties and may include equipment maintenance and procedures required to keep operations continuing in a contaminated environment.
- 2.4.2.4. Aircraft egress/flightline operations training is an integral part of initial and annual technician training for all life support personnel. The initial qualification session will be administered prior to an individual performing any task aboard unit aircraft.
- 2.4.2.5. Supervisors will evaluate all technical school graduates (AFSC 1T1X1) to ensure proficiency levels as specified in the approved Career Field Education and Training Plan (CFETP) have been met. Deficiencies will be reported on AF Form 1284 (Training Quality Report). Information copies of AETC questionnaires concerning recent technical school graduates will be forwarded to HQ PACAF/DOTT and ANGRC/DOS as applicable. Additional information on this subject is contained in AFI 36-2201 and AFI 36-2202.
- 2.4.3. Self Assessment (SA) Program. The SA program is established for the purpose of reviewing key processes and provides an overall objective assessment of the life support program. SA will be conducted at all levels of the life support program at least annually. Unit and OSS SA will be conducted on alternate six month intervals. The written report will outline quality trends (positive and negative), strengths, problem areas and solutions, life support equipment quality, customer satisfaction, internal/external agency support, personnel qualifications training, TO/publications familiarization, command policy implementation, etc. The OSS/SA will include visits to all sections within the unit. SA findings will be channeled through the Operations Group/CC. Visits by other outside agency does not take the place of unit SA responsibilities.
 - 2.4.3.1. Staff assistance visit (SAV) conducted by HQ PACAF/DOTT will use the SA approach and reporting. The purpose of the SAV is to promote an exchange of information and to assess established policy and procedures.
 - 2.4.3.2. In preparation for these visits, units should prepare a folder containing: last unit SA, supplements to PACAFI 11-301, metrics, flow charts, and a list of recent awards/recognition (individual/unit).

- 2.4.4. Quality Assurance. The life support QA program is designed to measure the effectiveness of the life support products/services and provide a means to achieve a statistical analysis for continuous improvement of the overall life support program.
 - 2.4.4.1. A QA program will be established at squadron/shop levels to detect trends or deficiencies in life support equipment maintenance, training, service, etc.
 - 2.4.4.2. Each OSS/LSS will develop a QA program that objectively evaluates the SQ QA program.
- 2.4.5. Life Support Systems Quality Council (LSSQC) The LSSQC reviews and takes action on problems associated with equipment maintenance, modification, or introduction of new equipment or procedures.
 - 2.4.5.1. Units will use the team approach in a seminar type team meeting held at a specific interval (monthly, quarterly, or semiannually) determined jointly by the OSS Life Support Officer or Superintendent and the LG Quality Assurance Supervisor.
 - 2.4.5.2. Team members will consist of life support, egress, quality assurance, and survival equipment. Other agencies may be invited as necessary to resolve performance requirements.
 - 2.4.5.3. Problems that cannot be resolved at unit level will be elevated to HQ PACAF counterparts for resolution. ANG units will direct their problems through the Weapons System Team Chief (WSTC) to HQ PACAF/DOTT with info to ANGRC/DOT.
- **2.5.** Administration/Operating Instructions (OIs). The OSS life support superintendent serves as the focal point for all wing life support administrative actions. Unit NCOICs are responsible for preparing and maintaining correspondence and local directives.

2.6. Responsibilities:

- 2.6.1. HQ PACAF/DOTT: Provide management oversight of command life support requirements as outlined in AFI 11-301. Specific responsibilities are as follows:
 - 2.6.1.1. Provide command guidance for the use, care, control, and safeguarding of life support equipment in PACAFI 11-301.
 - 2.6.1.2. Act as the focal point for coordination between PACAF, other MAJCOMs, and logistics centers concerning operational life support matters.
 - 2.6.1.3. Conduct periodic site visits to PACAF units.
 - 2.6.1.4. Host the annual HQ PACAF Life Support Workshop, and represent the command at Life Support Workshops, Life Support and Survival Course Training Standards workshops, and attend other Life Support and survival training conferences as required.
 - 2.6.1.5. Initiate, coordinate, and make recommendations on supply requests regarding LSE procurement and other supply assistance as required.
 - 2.6.1.6. Provide priority allocation and distribution instructions to DO/LG for life support equipment.
 - 2.6.1.7. Monitor aircraft conversion, TCTO, and modification programs to ensure the integration of life support equipment with aircrew recovery systems.

- 2.6.1.8. Determine MAJCOM position on optional technical order procedures. When procedures in technical orders are listed as MAJCOM option, HQ PACAF/DOTT will determine whether to make them optional or mandatory.
- 2.6.2. Operations Group Responsibilities. The Operations Group Commander will:
 - 2.6.2.1. Assign a wing LSO, Senior NCO superintendent, and an aircrew life support/survival, evasion, resistance, and escape (SERE) training instructor within the Operations Group. LSOs must be rated and currently flying an assigned aircraft. Prefix Z will be used to identify primary duty LSOs. Prefix Z is affixed to the duty AFSC upon assignment as the Life Support Officer and retained only as long as assigned to that position. The prefix is affixed to the AFSC (primary, second, or third) in which qualification as a life support officer was demonstrated and is retained as long as the officer remains qualified. Assignment stability is an important part of the life support function. Primary duty LSOs should serve a minimum of 12 months. Ensure a primary duty LSO and LSS (1T191/71) are functionally aligned under the OG/CC.
 - 2.6.2.2. Ensure sufficient funding is allocated for the continued management of life support programs and contingency plans.
 - 2.6.2.3. Keep life support advised of applicable contingency plans to ensure proper LSE and support equipment is available for deployment.
 - 2.6.2.4. Ensure life support personnel (AFSC 1T1X1) are not assigned additional duties, details, or assignments (i.e., First Sergeant) that interfere with their primary life support duties. During ORIs and sortie generation exercises, they will not be assigned additional duties and details that may interfere with aircraft equipment loading or that may limit or hamper chemical Contamination Control Area (CCA) operations issue and fitting of applicable aircrew equipment.
- 2.6.3. The OG LSO and life support superintendent (LSS) responsibility: As functional managers of the OG life support program, the LSO and LSS will ensure life support personnel qualifications, equipment, and manning meets mission requirements.
 - 2.6.3.1. The LSS is the OG/CC POC for LS functional responsibilities, manpower/manning requirements, and assignment of personnel.
 - 2.6.3.1.1. The LSS must establish liaison and coordinate with other organizations supporting the life support function to ensure that equipment is adequately maintained.
 - 2.6.3.1.2. The LSS implements current life support policies, regulations, and guidance established by higher headquarters directives.
 - 2.6.3.2. LSO/LSS will act as Weapon System Team Chief (WSTC) and provide guidance/suggestions (ALS lesson plans, recommendations on equipment configuration, MAJCOM options, etc.) for the command. WSTC assignments are listed in Attachment 3.
 - 2.6.3.3. The LSO/LSS implement wing life support policy/procedures.
 - 2.6.3.4. The LSS performs a wing-wide self assessment program at least once every year and documented IAW paragraph 2.4.3. of this instruction.
 - 2.6.3.5. The LSO/LSS develops and publishes a wing supplement to this instruction if required.
 - 2.6.3.6. The LSO/LSS establish communications among OG/OSS/squadron agencies to ensure appropriate issues are elevated/addressed.

- 2.6.3.7. The LSS evaluates/assesses life support combat capability during local exercises. The evaluation/assessment will specifically address equipment combat configuration, mobility, CCA processing, aircrew chemical defense equipment donning/doffing proficiency, reordering procedures, and emergency evacuation procedures.
- 2.6.3.8. The LSO/LSS manages the aircrew life support continuation training programs and certifies those personnel responsible for providing aircrew life support training. The LSO, LSS if no LSO is assigned, will train and certify SQ LSO's to conduct egress training.
- 2.6.3.9. The LSO/LSS conducts operational test-and-evaluation (OT&E) of life support equipment as directed by higher headquarters.
- 2.6.3.10. The LSO/LSS ensure availability of sufficient life support equipment to support mission requirements IAW AFM 67-1, USAF Supply Manual.
- 2.6.3.11. The LSS initiates and monitors all life support systems equipment deficiency reports IAW TO 00-35D-54.
- 2.6.3.12. The LSS prepares and submits operational requirements to higher headquarters for evaluation and action IAW AFI 10-601.
- 2.6.3.13. The LSO/LSS assist the flight surgeon in completing AF Form 711GA (Life Sciences Report of an Individual Involved in an AF Flight/Flight Related Mishap). LSOs/LSSs who have attended the Air Force Life Science Accident Equipment Investigation Course may perform these duties. LSS will make ever effort to attend this course.
- 2.6.3.14. The LSS will ensure each squadron establishes a tool control program to meet the intent of PACAFI 21-101.
- 2.6.3.15. Survival, Evasion, Resistance, Escape (SERE) Instructors, (AFSC 1T0X1). Each wing will have a minimum of one SERE instructor assigned. SERE personnel are assigned to conduct combat survival training and SERE training refresher. They may also be responsible for aircrew life support, and chemical warfare defense training as deemed necessary by the LSO/LSS. WSTC SERE instructor personnel develop tasked (see Attachment 3) core ALS lesson plans for the command to reduce the manpower required and to standardize quality. The SERE instructor will work for the LSO/LSS and assist in other tasks as required. Instructors should be required to provide training for deploying aircrews and other personnel during exercises as they would during actual situations.

2.6.4. Squadron Commanders Responsibilities:

- 2.6.4.1. Within the squadron, appoint a rated LSO who has completed the requirements listed in IAW AFI 11-301. If one is not assigned, the responsibilities will be assumed by the squadron commander/operations officer.
- 2.6.4.2. Squadron level additional duty LSOs should serve in this capacity for a minimum of 12 months.
- 2.6.4.3. Ensure squadron LSOs are either pilots or navigators/WSOs and retain their primary flying AFSCs.
- 2.6.4.4. Ensure procedures are established for non-ejection seat crewmembers to:

- 2.6.4.4.1. Return all previously signed out equipment to the life support facility at the end of each flying day or upon returning from alert/TDY/deployment.
- 2.6.4.4.2. Require all arriving or departing PCS aircrew members to process through the life support section to initiate/terminate required services.
- 2.6.4.4.3. Maintain currency in all aspects of life support and SERE training and use of applicable life support equipment.
- 2.6.4.4.4. Ensure Prepositioned Life Support Equipment indicated on AFTO Form 46 is complete and equipment discrepancies are properly documented prior to each flight.
- 2.6.4.5. Ensure crewmembers deployable to threat environments possess all required equipment outlined in Table 7.1 of this regulation as well as other applicable flying regulations.
- 2.6.4.6. Ensure Life Support Personnel (AFSC 1T1X1) and SERE instructors (AFSC 1T0X1) are not assigned additional duties, details, or assignments. During ORIs and generation exercises, life support personnel must be available to perform mission essential duties (e.g. aircrew CCA processing operations, life support equipment uploads/downloads, ETC).
- 2.6.5. Squadron NCOIC/LSO responsibilities.
 - 2.6.5.1. Implement policies and procedures as directed by higher headquarters through the OG LSO/LSS.
 - 2.6.5.2. Establish a comprehensive life support program, develop and publish procedures, and monitor the implementation of these procedures to ensure the highest quality maintenance of life support equipment.
 - 2.6.5.3. Prepare and maintain current operating instructions as required. (Hazardous Communications/Explosive safety, Technician training, Aircrew training, Quality Assurance Procedures as a minimum) OIs will address issues to meet local mission requirements such as response to emergency action (recall), radio operation, vehicle control/use, fire protection, explosive safety, and directive familiarization, etc. OIs will be reviewed during each SA visit.
 - 2.6.5.4. Maintain a current file of instructions, regulations, manuals, procedures, and technical orders pertaining to issue, inspection, maintenance, and use of life support equipment or systems possessed, and ensure compliance with instructions contained therein.
 - 2.6.5.5. Develop a program for certifying quality assurance (QA) inspectors (should be seven levels if possible) to ensure QA inspectors are properly performing QA inspection/documentation/communication/follow-up procedures.
 - 2.6.5.6. Submit operational life support requirements for evaluation and action to the next higher headquarters.
 - 2.6.5.7. Ensure life support related deficiency/hazard reports/suggestions and AFTO Forms 22 are routed through the operations group LSO/LSS for evaluation prior to submittal to the next evaluation level. Ensure that deficiency reports, technical order changes, modification proposals, and suggestions are submitted and properly evaluated/processed IAW TOs OO-35D-54 and 00-5-1, DODI 5000-2 AF SUP 1, and AFI 38-401.
 - 2.6.5.8. Perform an in-depth program assessment every year. A record of inspections and corrective actions will be maintained for two years. This program assessment will not be conducted con-

- currently with OG/OSS SA visits. Recommend it be done half way between OG/OSS SA. Open discrepancies will be reviewed and documented monthly until corrective action is completed.
- 2.6.5.9. Ensure that all aircrew members and life support personnel are adequately trained and the training is documented as required by applicable directives. Life support specialist certifications will be documented IAW the CFETP.
- 2.6.5.10. Maintain accurate records of:
 - 2.6.5.10.1. Job proficiency guides IAW AFI 36-2201 for each assigned life support specialist.
 - 2.6.5.10.2. AF Form 623, On-the-Job Training Record, for all 1T1X1 personnel assigned.
 - 2.6.5.10.3. All supply actions to include custodial accounts records, current inventories, outstanding requisitions, and follow-up actions.
- 2.6.5.11. Maintaining supply discipline by expeditiously returning excess equipment to the supply system and ensuring specialists are aware of their responsibility for protection of government supplies and equipment.
- 2.6.5.12. Maintain current authorization source documents (letter of "Xs", manpower/manning documents) to validate authorized quantities.
- 2.6.5.13. Provide quantitative requirements to the commander to assist in budgeting and funding life support equipment/systems.
- 2.6.5.14. Perform annual task evaluations, for major task items, on assigned personnel (biennial for full time technician ANG personnel). These evaluations will include in-shop and flightline inspection and maintenance task. These evaluations will be documented on AF Form 1098, AF Form 803, or other equivalent form IAW AFI 36-2201.
- 2.6.5.15. Ensure that life support specialists aid aircrew members in donning, doffing, and life support equipment preflight inspections to the maximum extent possible.
- 2.6.5.16. Postflight all LSE IAW T.O. and local guidance.
- 2.6.5.17. Requisition, store, inspect, maintain, and configure aircraft with required life support equipment. Maintain a file of completed AFTO Forms 46 for all assigned aircraft. Copies should be purged each quarter or when no longer required.
- 2.6.5.18. Ensure reparable and condemned items are promptly processed for turn-in. Serviceable and reparable items will be binned separately and condition tagged IAW AFR 67-1. Equipment "FOR TRAINING USE ONLY" will be identified as such and will be inspected for serviceability to meet training objectives. Training equipment will have a installation date or some way of tracking its uses clearly documented. Equipment (rafts, CO2 cylinders, kits, components, etc.) used (actual use or for training) by pararescue personnel will be marked (FOR PARARESCUE OR TRAINING USE ONLY) to preclude use for other purposes.
- 2.6.5.19. Keep pyrotechnic storage in life support facilities to a minimum. In order to simplify storage, control, and handling procedures, units may store flares in the base munitions storage area and obtain them on an "as-required" basis to support time-change and inspection requirements. Life support shops are not authorized to store pyrotechnics for other support agencies, i.e. survival equipment/egress. Storage facilities within life support sections will be IAW AFMAN 91-201 and

- AFR 127-100 (AFI 91-201). All areas used for inspecting or storing pyrotechnics will be licensed and will have all required safety measures.
- 2.6.5.20. Ensure compliance with Composite Tool Kit (CTK) and Test Equipment Management Program requirements for flight line tool kits/boxes. Tools will be inventoried prior to departing both the shop and the aircraft. CTK will be maintained IAW PACAFI 21-101.
- 2.6.5.21. Ensure compliance with all safety standards to include but not limited to Explosive Safety/AFOSH training, documentation, and increased precautions for storage of lithium batteries and other hazardous material (AFI 91-201, AFI 91-301, AFR 67-1, Vol. 1, Part one, Section C).
 - 2.6.5.21.1. Ensure that all occupational hazards are abated by identifing all hazards (noise, high pressure, vapor, explosives, infection control, etc.) to Military Public Health (MPH) and following their individual training and hazard abatement plan. Document technician training IAW AFI 91-301.
- 2.6.5.22. Squadrons that have a combat or combat support mission will have a LS mobility/contingency package that includes necessary supplies, equipment, AFTO forms, regulations, and technical orders to support a self sustaining operation for all known contingencies (ACDE storage racks, work areas, and CCA equipment and supplies). Adequate equipment and supplies will be maintained for 60 days of combat operations. Unit personnel will demonstrate the capabilities identified in Chapter 7.
- 2.6.6. En route Support (non-ejection seat aircraft).
 - 2.6.6.1. Commanders of PACAF units are to ensure their aircrews and aircraft leaving home station have the appropriate life support equipment required for all anticipated contingency operations.
 - 2.6.6.2. When/if en route taskings require additional equipment, the en route location will provide required support to meet that specific mission need if possible. Upon return to home station, life support supervisors will return equipment to the owning organization. As taskings occur, en route life support personnel should make appropriate aircraft form entries and notify the home unit of the tasking, aircraft tail numbers, dates, names of flight crew, etc. Direct communication among organizations is highly encouraged prior to, during, and after shipping equipment.
 - 2.6.6.3. If the home station AFTO Form 46 is missing, fill out a new form reflecting the current aircraft configuration. Copies of changed/replaced AFTO Forms 46 will be immediately forwarded to the owning organization.
 - 2.6.6.4. When reconfigurations occur at en route locations, the owning organization's life support equipment will remain on the aircraft to the maximum extent possible. If the equipment is stored, the down-loading unit will ensure proper security, control, accountability, and will make arrangements to keep inspections current or return equipment to its home station. Do not unnecessarily retain any life support equipment removed from en route aircraft. Return equipment to the owning unit using Shipping Priority Designator 02 (SPD-02).
 - 2.6.6.5. HQ AMC/DOTL has arranged for small quantities of Aircrew Chemical Defense Ensembles (ACDE) to be stored at Yokota AB. This equipment is available for the primary purpose of outfitting en route (e.g., channel missions) aircrews who may get stranded during wartime taskings. Life support personnel manning Yokota AB for C-130 operations will maintain and issue

this ACDE. This in-place ACDE is not intended as a substitute for aircrews hand-carrying their equipment into theater locations or when higher headquarters provides advanced notice.

2.7. Related Maintenance and Base Support Activity Responsibilities:

- 2.7.1. Organizational Maintenance Responsibilities.
 - 2.7.1.1. Install/remove, and maintain all emergency egress descent devices, palletized seat kits, automatic oxygen mask presentation units.
 - 2.7.1.2. Install/remove escape slides, multiplace life rafts which are attached to the aircraft in wing wells, overhead cradles, silos, or raft launching devices.
 - 2.7.1.3. Provide subassembly replacement items, time change items and parts such as parachute components, and process life raft carbon dioxide cylinders to depot for hydrostatic testing and/or obtain replacement cylinders from supply.
 - 2.7.1.4. When required, establish procedures for removal, pickup/delivery of quick start masks to the life support facility for inspection/maintenance. The owning maintenance organization is responsible for replacement of condemned masks and canisters.
 - 2.7.1.5. When crew chief or fuel personnel helmets/oxygen masks are required, maintenance supervision will work with the OG life support staff to establish procedures listed in Chapter 5 of this regulation.

2.7.2. Survival Equipment Section:

- 2.7.2.1. Performs required periodic inspections, repair, and repack of personnel parachutes and integrated parachutes and harnesses (14D series TOs). Documents completed work on computer generated AFTO Form 349, Maintenance Data Collection Record; AFTO Form 391, Parachute Log and AFTO Form 392, Parachute Repack, Inspection and Component Record. Requisitions parts or material and replaces all unserviceable components of in-service parachutes and harnesses.
- 2.7.2.2. Performs required periodic inspection, repair, and repacking of drogue chutes.
- 2.7.2.3. Provides support for inspection, repacking, maintenance, TCTO kits, acquisition of spare parts, and replacement items for survival training parachutes.
- 2.7.2.4. Inspects, repacks, and makes authorized repairs to life preservers IAW applicable TOs. Requisitions parts and replaces all unserviceable components to include CO2 cylinders.
- 2.7.2.5. Performs required periodic inspections and makes authorized repairs on life rafts. Requisitions parts and replaces unserviceable components.
- 2.7.2.6. Initially assembles and periodically repairs anti-exposure suit coveralls as required. Requisitions and replaces unserviceable components. EXCEPTION: Life support will requisition initial suit buildup components and maintain a limited stock for mobility spares.
- 2.7.2.7. Makes authorized repairs and/or modifications on anti-G garments.
- 2.7.2.8. Inspects, repacks, and makes repairs to emergency evacuation slides, as required by aircraft and maintenance TOs.

- 2.7.2.9. Requisitions and replaces parts (zippers, cuffs) and repairs flight clothing and equipment. Maintains bench stock items for equipment repairs.
- 2.7.2.10. Manufactures passenger oxygen kit (POK) carrying bags as required by life support units.

2.7.3. Egress Section:

- 2.7.3.1. Removes and reinstalls aircraft-installed integral parachutes and survival kits only when they must be removed for other than periodic inspection and maintenance.
- 2.7.3.2. When required, removes and reinstalls emergency oxygen cylinders on ejection seat aircraft with integral emergency oxygen cylinders.
- 2.7.3.3. Clears the red X symbols after final inspection of the overall ejection seat system.
- 2.7.3.4. Provides maintenance, update, and modification of egress procedures trainers (EPT) and training seats held by life support and survival training sections.
- 2.7.3.5. Conducts cockpit familiarization training for life support specialists (1T1X1) and certifies/recertifies life support specialist to remove/install survival kits and parachutes when they are an integral part of the ejection seat as required by AFI 21-112. This training is normally scheduled through the Unit Training Office.
- 2.7.4. Avionics Maintenance Section (may be at another base under two level maintenance):
 - 2.7.4.1. If equipped, repairs and/or inspects all night vision goggles which have been rejected by the life support inspectors/tests IAW TOs.
 - 2.7.4.2. Performs required periodic inspections, repairs, TCTO modifications, and acquisition of spare parts for survival/training radios and personnel locator beacons. The inspection frequency is the same as that established for standard operational equipment.
- 2.7.5. Aircraft Electrical Environmental System Section:
 - 2.7.5.1. Provides inspection, refilling, overhaul, and replacement of life raft carbon dioxide cylinders and emergency oxygen cylinders, as required by life support, egress, and survival equipment sections.
 - 2.7.5.2. Keeps a benchstock of items needed to repair carbon dioxide and oxygen cylinders.
- 2.7.6. Plans, Scheduling and Documentation Section:
 - 2.7.6.1. Notifies the life support section of all new aircraft arrivals and transfers so they can process documentation records.
 - 2.7.6.2. Contacts the life support section to perform incoming aircraft acceptance inspections of survival kits, parachutes, and other aircraft-installed life support equipment.
- 2.7.7. Flight Medicine. Visits the life support section quarterly to ensure compliance with TO 15X-1-1 standards. The flight surgeon inspects life support shops for sanitation and assists in resolving mask fitting problems. In addition, the environmental health section checks environmental controls for adequate operation and safe performance.
- 2.7.8. Medical Support. Inspects and maintains first aid kits IAW applicable directives and replaces unserviceable components as necessary. Environmental Health inspects rations and canned water.

Medical supply personnel maintain all first aid kits and such necessary cleaning supplies as alcohol and gauze pads. Each life support shop will establish a medical supply account with their servicing medical treatment facility for reimbursement of medical supplies.

- 2.7.9. Munitions Operations (AFK). Monitors the status of munitions suspended or restricted by TO 11A-1-1. Provides immediate oral and written notice of suspended or restricted lot numbers to all known users of affected NSNs. OPR for submission of the Annual Munitions Forecast at the unit level.
- **2.8. Life Support Facilities and Hygiene.** Facilities will be maintained IAW applicable AFOSH and TO 15X-1-1 standards. The sensitivity of life support equipment requires environmental and climatic controls.
 - 2.8.1. Store equipment neatly and separated into areas to prevent commingling of serviceable, reparable, unserviceable and "ready-for-repair" equipment categories. Provisions will be made to store shelf stock components in a manner to protect items from dust/impurities when not assigned for use (e.g., breathing hoses, oxygen masks, valves, connectors, etc.,).
 - 2.8.2. Ensure sufficient work and storage areas are available for inspections and storage. When necessary, pad and cover work benches and storage bins with material to provide smooth surfaces/edges.
 - 2.8.3. Personnel may wear lint-free smocks while performing duties in the oxygen section. If worn, the smocks will be kept cleaned and not worn outside the section. Personnel will wear smocks as specified IAW AFI 36-2903.
 - 2.8.4. Infection control guidelines from Military Public Health (Bioenvironmental) will be followed IAW AFI 91-301 when working on life support equipment. LS technician's AF Form 55 will document this training. Abatement aids will be made available.
- **2.9. Security.** As a minimum, life support shops are considered "Limited Access Areas". Therefore, appropriate measures will be taken to control visitors and safeguard life support equipment.
- **2.10. Mishap Prevention.** Safety is paramount. A mishap prevention program tailored to the needs of life support personnel will be administered using the applicable portions of AFI 91-202. The local wing or group safety staff should be contacted to ensure all shop hazards are addressed and procedures are established. As a minimum, local procedures should address explosive safety and wear of ear protection and jewelry when in, on, or around the aircraft.
- **2.11.** Core Automated Maintenance System (CAMS). CAMS is a tool for use by life support personnel. Units are authorized and encouraged to use CAMS to best suit their needs. CAMS interacts with all maintenance activities and may be the best way for mission accomplishment. Units tracking equipment with the CAMS program are not required to duplicate the data maintained in the computer on status boards, shop inspection cards, or forms.
 - 2.11.1. Life support units will maintain a master copy (tape or disk backup) of each applicable data file prior to deleting status boards or in-shop inspection cards.
 - 2.11.2. Update information in each life support equipment data file as necessary.
 - 2.11.3. Annotate computer generated inspection documents containing historical information in ink and retain until the next inspection is completed.

- 2.11.4. Units are authorized to use CAMS generated inspection forms. Retain inspection cards and forms replaced by CAMS for 12 months for historical purposes.
- 2.11.5. Continue to use and maintain inspection tags as required for survival kits, accessory kits, etc.
- 2.11.6. Submit CAMS program problems on an AF Form 1775 (Software Problem Report SPR) and suggested enhancements on AF Form 1773 (Baseline Change Request BCR).
- **2.12. Automated Life Support Management Systems (ALSMS).** Units should use ALSMS as their primary means of tracking and recording inspections. Units are not required to duplicate the data maintained in ALSMS. A printed hard copy will be obtained prior to removing status boards. A back-up disk and hard copy of required data will be maintained in case of a malfunction. Inspection tags or booklets that are attached or installed on equipment will continue to be used.

LIFE SUPPORT AWARDS PROGRAM

- **3.1. General.** The PACAF life support awards are designed to acknowledge the exceptional accomplishments of PACAF life support units, individual life support personnel, and survival training instructors. These awards are for those professionals whose superior performance added value to the career field and their unit's life support program (not applicable to ANG). Further guidance is provided in AFI 36-2807.
- **3.2. Frequency of Award.** Each calendar year. Forward nomination packages to HQ PACAF/DOTT, 25 E Street, STE I232, Hickam AFB HI 96853-5426.
- **3.3. Personnel Award Criteria.** To be considered for an award nominees must have at least six months in present assignment and be actively working in the career field at the time of nomination. The nominee must not have been on the control roster during the preceding calendar year, the last Enlisted Performance Report (EPR) must be rated "outstanding" and the nominee must have completed all appropriate levels of Professional Military Education (PME) in-residence or be enrolled therein. Do not submit copies of EPRs or other material.
 - 3.3.1. Outstanding PACAF Life Support Senior NCO of the Year Award. Individual must be an Air Force senior NCO in the grades Master Sergeant or Senior Master Sergeant (DOR before 1 September of year considered for award), and possess a primary Air Force Specialty Code (AFSC) 1T1X1 (7/9 level).
 - 3.3.2. Outstanding PACAF Life Support NCO of the Year Award. Individual must be an NCO in grades Sergeant through Technical Sergeant (DOR before 1 September of year considered for award), and possess a primary AFSC 1T1X1 (5/7 level).
 - 3.3.3. Outstanding PACAF Life Support Airman of the Year Award. Individual must be in grades Airman through Senior Airman, and possess a primary AFSC 1T1X1 (3/5 level). The nominee will have at least one year time-in-service (TIS). If individuals have insufficient TIS for an EPR, their demonstrated performance must be "outstanding".
 - 3.3.4. Outstanding PACAF SERE Training Instructor of the Year Award. Nominee may be in any grade through Technical Sergeant, be assigned to a PACAF unit, and possess a primary AFSC 1T0X1 (5/7 level).
- **3.4.** Unit Award Criteria. Outstanding Life Support Unit of the Year Award. Nomination may highlight self-help projects, projects of lasting unit/PACAF/USAF impact, contributions to the unit mission, and results from ORI, QAFA, or other higher headquarters visits. The Unit Award nomination package will include a cover letter from the Operations Group Commander. The Unit Award nomination package will be prepared following the procedures specified in paragraphs 3.6.1., 3.6.2., 3.6.4., and 3.6.5.
- **3.5. Nominations.** Each wing may nominate one airman, one NCO, one senior NCO, one SERE training instructor, and one unit program.

3.6. Package Preparation:

- 3.6.1. Label a 9 x 12 inch folder with nominee's name, grade or unit for Unit Award, organization. Nomination folders must contain an original and five copies (unstapled) of the nomination package. The nomination package must consist of a letter of transmittal signed by the Operations Group Commander (or equivalent) and attachments following the format specified by AFI 36-2807.
- 3.6.2. Attachment 1 will be AF Form 1206, Nomination for Award, to justify the award. The narrative should emphasize the contributions made to the unit's mission accomplishment. The narrative will only cover the accomplishments from 1 Jan of the nomination year to 31 Dec. If feasible, recommend the narrative be typewritten using PerFORM PRO Filler.
- 3.6.3. Attachment 2 will be a one page dated listing of biographical data to include noteworthy awards/recognition. It will be typewritten (use 12-pitch type) and double-spaced with 1-inch margins.
- 3.6.4. Attachment 3 will be the proposed citation to accompany the award. Use procedures and format specified in AFI 36-2803. Proposed citations must be double spaced, typed in 10-pitch with 1-inch margins, and a maximum length of 15 lines.
- 3.6.5. A 3.5 diskette containing the nomination packages should also be submitted along with the above.
- **3.7. Selection Procedures.** Forward nomination packages for receipt at HQ PACAF not later than 15 January each year. A board of senior officers and SNCOs at HQ PACAF/DO will evaluate all nomination packages and forward to PACAF/DO who will make the final selection. Individual award winners' packages will be forwarded for competition at Air Force level, therefore following the prescribed formats is essential.
- **3.8. Notification of Selection.** After the winners are selected, notification is made via message from PACAF/DO. Winners' packages will be forwarded to HQ USAF to compete in the annual Outstanding Air Force Life Support and SERE Training Instructor awards program.
- **3.9. Presentations.** Awards will be presented with an appropriate level of recognition at a time to be determined by the wing commander.
- **3.10. THE USAF "AIRCREW SAVER" AWARD.** The USAF "Aircrew Saver" Award is a USAF-directed program designed to recognize individual specialist who are responsible for the preparation and certification of ejection seats, survival equipment, and parachutes used in successful egress from USAF aircraft. Criteria for this award can be found in AFI 36-2833.

SUPPLY PROCEDURES/RESOURCE MANAGEMENT

4.1. General. This chapter is designed to establish command guidance for equipment and supply related procedures not specifically addressed in other publications.

4.2. Equipment Authorizations:

- 4.2.1. Each life support shop will budget for and establish their own supply account as specified by AFM 67-1. Commanders will appoint trained primary and alternate supply custodians. When appropriate, local contingency plans will include qualified life support technicians who will assume supply custodial responsibilities at deployed life support shops.
- 4.2.2. Use Table of Allowances (TAs) 016 and 450, aircraft configuration regulations, mission requirements, and this regulation to determine the basis of equipment required. An additional 10 percent (a minimum of one set when equipment is required to be designated in sets) is authorized for change-outs to minimize aircraft down times. Units having an OPLAN/ CONPLAN tasking are authorized an additional set for mobility purposes. Additional authorizations may be required to maintain equipment as whole sets. Unit authorizations will be figured as TA authorization/mission requirements/aircraft configurations + Mobility + Changout + 10% = Total Authorization.
- 4.2.3. In order to assure an appropriate state of readiness and to meet PACAF mission response times, units will maintain sufficient quantities of equipment/supplies to meet the unit's most probable wartime commitments.
 - 4.2.3.1. Units experiencing an equipment shortage as a result of a one-time mission tasking may work with units with similar weapons systems within PACAF to satisfy this requirement.

4.3. Equipment Control:

- 4.3.1. Following the final mission of the day or upon return to home station from TDYs, etc., life support personnel will perform a Mission Termination Inventory (MTI) of Non Ejection Seat (NES) aircraft installed life support equipment for accountability and serviceability. In the event equipment discrepancies or loss is discovered, proper corrective actions for off-station losses will include messages describing lost equipment, TDY duration, and route of off-station aircraft. Wing procedures will be established to notify applicable agencies in the event of equipment loss, suspected abuse, pilferage, or mishandling.
- 4.3.2. Life support personnel will perform a preflight or MTI postflight inspection of life support equipment for the following aircraft: C-9, C-12, C-130, C-135, E-3, KC-135, HH-60; the UH-1 when equipment has been loaded aboard the helicopter. A procedure will be established by the LSO/LSS.
- 4.3.3. Local procedures will be established to document, control, and retrieve life support equipment required for temporary issue.
- 4.3.4. Equipment exceeding day-to-day mission requirements but required for contingencies may be placed in "Serviceable Storage." However, inspection and storage procedures established in applicable TOs for "Stored Equipment" will be followed without deviation. All equipment will be maintained in "Ready for Use/Inspect Prior to Issue" status with all TCTOs and modifications complied

- with. Units should establish procedures to fit/issue this equipment based on local mission commitments.
- 4.3.5. When life support equipment has been removed or identified as being from transient aircraft, the owning life support section will be immediately notified citing type of aircraft, tail number, type equipment, quantity of equipment removed, and present location. Return equipment to owning unit through base transportation channels using SPD-02. Call owning unit for shipping fund citation if required and mark assets clearly for the gaining life support unit.
- 4.3.6. When assigned, serial numbers will be recorded on the appropriate inspection forms.
- 4.3.7. All multiperson life raft cases, accessory containers, and life preserver cases will be stenciled with a local number as specified by the owning unit.
- 4.3.8. Training equipment will be marked IAW applicable technical orders, maintained sufficiently to ensure realism, and should mirror the installed/in-use equipment. Training equipment should have installation dates or usage recorded to ensure equipment is not left in service exceeding its designed service life.
- **4.4. Equipment Redistribution.** In the event life support equipment becomes excess to organizational needs, superintendents will notify HQ PACAF/DOTT for redistribution prior to turn-in. Equipment shortages which impact/limit mission effectiveness will also be forwarded to HQ PACAF/DOTT. Unit supply custodians will submit supply assistance request with mission impact statements to their local supply activity in an effort to resolve equipment shortages locally prior to notifying HQ PACAF/DOTT. When identifying shortages to HQ PACAF/DOTT specify authorized/on-hand quantities, backorders to include NSN, quantity, priorities/UJC, off-base requisition number, and current status (i.e., firm or memo, estimated delivery date).

4.5. Transfer of Life Support Equipment.

- 4.5.1. During aircraft transfers or movement of life support equipment, communication between gaining or losing units is encouraged. Contact with supply should be initiated at least 10 days prior to transfer. In the unlikely event life support issues cannot be resolved at the unit level, HQ PACAF/DOTT serves as the focal point for aircraft transfers, TDYs, or depot input/retrievals involving life support related issues. ANGRC/DOSF is the focal point for the ANG.
- 4.5.2. Units involved in aircraft transfers will transfer only the equipment listed in Table 5-1 which is designated as the standard load of equipment. Aircraft transfer equipment shortages will not be tolerated unless the losing and gaining unit has written authorization from their MAJCOMs. PACAF units swapping like aircraft and desiring to retain local life support equipment may do so provided it is on mutual agreement of both gaining and losing organizations and arrangements are coordinated to satisfy this regulation and ferrying aircrew's mission needs.
- 4.5.3. Due to the lack of life support expertise at multiplace aircraft depot level maintenance locations, life support equipment maintenance accountability can be provided only by the organization owning the aircraft. In order to maintain the highest standard for PACAF life support equipment, the following steps will be followed:
 - 4.5.3.1. During fighter aircraft ferry/depot deliveries, if the pilot elects to wear the survival vest and the survival kit contains all mandatory components per paragraph 5.7 and the aircrew is scheduled to return via commercial travel, the appropriate hazardous/pyrotechnic devices will be

removed from the survival vest. Procedures will be established to ensure aircrews are briefed on survival kit and vest configuration.

4.5.3.2. Multiplace aircraft depot inputs that will return to the unit will have the minimum quantities of flotation equipment required to support onboard personnel. The equipment will remain at the depot facility during aircraft maintenance. Aircraft not scheduled for return to the unit will comply with paragraph 4.5.2.

EQUIPMENT MAINTENANCE AND INSPECTION REQUIREMENTS

5.1. General. This chapter prescribes the flight clothing and equipment to be worn or carried by aircrew members and passengers. It applies to all PACAF flying units and to aircrew members and passengers when flying in aircraft assigned or attached to PACAF organizations. All echelons will be kept advised of deficiency reports, hazard reports, waivers, and other correspondence relating to life support equipment and procedures. This chapter specifies minimum life support equipment to configure PACAF aircraft and is to be used in conjunction with aircraft configuration manuals. PACAF life support equipment is to be maintained according to this directive, the PACAF Life Support TO Options List, and applicable TOs.

5.2. Equipment Responsibilities:

- 5.2.1. Operations Group commanders will:
 - 5.2.1.1. Specify, by supplementing this regulation, the type of seasonal clothing, by temperature ranges and calendar months and the specific operational missions, when seasonal flying clothing will be worn. Deviations from AFI 36-2903 will be processed through normal channels.
 - 5.2.1.2. Ensure aircrew members are issued flying clothing and equipment considered adequate for the mission, climatic conditions, and terrain features and meets the requirements of AFI 36-2903, AFI 11-206, PACAFI 11-301, TO 14D1-1-1, and TO 14S3-1-3. 11AF will establish Arctic clothing requirements for all assigned and deployed aircrews.
- 5.2.2. Aircraft commanders will ensure:
 - 5.2.2.1. Aircrew members wear the clothing and equipment prescribed in this regulation and AFI 11-206.
 - 5.2.2.2. Sufficient life support equipment is aboard the aircraft for the entire flight profile.
 - 5.2.2.3. Aircrew members and passengers are familiar with the locations of available life support equipment prior to takeoff.
 - 5.2.2.4. Aircrew members and passengers are trained to perform normal and emergency life support procedures.
- 5.2.3. Aircrew members will:
 - 5.2.3.1. Ensure authorized/required flying clothing and equipment is available, serviceable, and safeguarded.
 - 5.2.3.2. Ensure individual equipment is checked for serviceability prior to flight and is made available to life support personnel for required periodic inspections.
 - 5.2.3.2.1. Preflight and adjust Night Vision Systems prior to the first flight of the day. Obtain assistance from life support personnel if required.
 - 5.2.3.3. Use helmet bags to transport the helmet and oxygen mask. Carry/store only the helmet and oxygen mask in the helmet bag's main pocket.
 - 5.2.3.4. Process through the appropriate life support agency prior to and after mobility/deployment, TDY, or PCS.

- 5.2.3.5. Ensure all individually issued items are made available to life support personnel for scheduled inspections, maintenance, and modifications. Aircrew members must make their equipment available in time to prevent inspection violations during TDYs and ordinary leaves.
- 5.2.3.6. Return all individually issued life support equipment to a designated area for postflight inspection and storage.
- 5.2.3.7. Inventory prepositioned life support equipment. Immediately report any unserviceable, missing, or tampered equipment to the life support section.
- 5.2.4. Life Support. LSOs, LSSs, and NCOICs will:
 - 5.2.4.1. Ensure life support equipment is assembled, maintained, and transported as prescribed herein, and IAW AFI 11-206, TO 14D1-1-1, TO 14S3-1-3, and the TOs pertaining to each particular piece of equipment. Equipment modifications will be accomplished using the PACAF aircrew life support T.O. options list (Attachment 11). Ensure each life support section has current TOs, tables of allowance (TAs), instructions, regulations, and manuals on all life support and test equipment maintained within the unit.
 - 5.2.4.2. Ensure technical data is available and used when inspecting, maintaining, and repairing life support equipment and systems.
 - 5.2.4.3. Monitor all active/ongoing modifications and TCTOs.
 - 5.2.4.4. Store, handle, service, and account for items which are part of the 412A Life Support System.
 - 5.2.4.4.1. Life support personnel will perform removal and installation of survival kits and parachutes from ejection systems for periodic inspection.
 - 5.2.4.5. Ensure appropriate AFTO Forms are properly maintained within the unit life support section to reflect current inspection dates on all life support equipment. Automated forms may be used if approved by local procedures. Annotations on AFTO Forms will include the following information:
 - 5.2.4.5.1. Messages that direct a one-time inspection, procedures check, or service life extension for an end item or component.
 - 5.2.4.5.2. Current TO/TCTO applicable to the end item, or component, and date accomplished.
 - 5.2.4.6. Ensure life support technicians are available to aid aircrew members in fitting and post-flighting life support equipment.
 - 5.2.4.7. Ensure an adequate mobility/deployment package is assembled to enable the unit life support section to effectively operate during deployments. Include equipment storage racks, work tables, CW ancillary equipment, etc., to complement available equipment at the deployed location.
 - 5.2.4.8. Ensure all life support technicians understand and comply with PACAFI 21-101, paragraph 2.22 "Composite Tool Kit" Program. Unit life support sections will develop and insert a tool inventory list in applicable checklists. A flightline tool inventory will be accomplished prior to departing the life support shop and again when departing the flightline. The CTK program applies to both in-shop and flightline tool kits.

- 5.2.4.9. Ensure all life support equipment inspections remain current throughout the scheduled mission duration.
- 5.2.4.10. Inspect and repack survival vests, kits, inner and outer life raft accessory containers, and applicable components.
- 5.2.4.11. Ensure passenger demonstration equipment is available and placed on-board all passenger carrying aircraft IAW Attachment 4.
- 5.2.4.12. Life support is responsible for maintaining applicable flight simulator life support equipment. The frequency and procurement will be as agreed upon and specified in the unit supplement to this regulation.
- 5.2.4.13. Life support is not responsible for storage, handling, servicing, or accountability of items such as thermos jugs, fire extinguishers, aircraft installed first aid kits, aircraft portable oxygen cylinders, pre-breather oxygen assemblies, headsets, Kevlar helmets, groundcrew chemical defense equipment, pyrotechnic flare pistols, E-and-E kits, flak vests, passenger service equipment, aircraft escape slides, dosimeters, or items not related to the 412A system. Life Support will not store, issue, or maintain weapons other than those intended for aircrew member issue/use.
- 5.2.4.14. 65 AS/DOL will maintain life support equipment used by HQ PACAF aircrews. Equipment should be serviceable when the aircrew member arrives at the TDY location. Should an inspection due-date coincide with a TDY, the inspection will be performed by a qualified life support technician at the TDY location. The unit life support NCO will document any maintenance/inspection actions taken and forward this documentation to 65 AS/DOL, 290 Vickers St, Hickam AFB, HI 96853-5001.
- 5.2.4.15. Torque wrenches will be selected based on the torque's utilized. Torque wrenches will not be utilized if the setting is lower than 20 percent or over its rated capacity.
- **5.3.** Combat Configuration. Sanitize all flight clothing prior to a deployment to a combat area or first employment mission. Sanitize all life support equipment and inspection forms. Use local control numbers on equipment and clothing items to identify and account for emergency/survival equipment.

5.4. Minimum Clothing and Equipment Requirements.

- 5.4.1. All aircrews will wear or carry the following minimum items of equipment:
 - 5.4.1.1. PACAF aircrews are authorized only the HGU-55/P helmet. Commercially procured helmets will not be used without the written concurrence of DOTT and HSC/YA. The SPH-4AF helmet will be utilized by helicopter crewmembers (this does not include PJs who will utilize the AF approved jump helmet). Helmets will be worn or carried as required by AFI 11-206 and the PACAF supplement.
 - 5.4.1.2. Wear the type oxygen mask required by the aircraft oxygen system.
 - 5.4.1.3. Anti-G garments are mandatory during all flights in aircraft equipped with an anti-G system.
 - 5.4.1.4. Aircrew Chemical Defense Equipment (ACDE) will be worn for training and as directed during combat operations. More detailed ACD guidance is in Chapter 7.

- 5.4.2. All aircrews will wear or carry the following minimum items of clothing. OG/CC will establish dates and combinations of protective clothing in their supplements.
 - 5.4.2.1. Flying Coveralls, Nomex, CWU-27/P will be worn on all flights. To comply with the intent of AFI 11-206, the outer layer of clothing will be of fire-retardant material. Fire-retardant underclothing (i.e., CWU-43/P, CWU-44/P, or material of 100% cotton) should be worn next to the skin. Dyed and machine-embroidered coveralls are not authorized. Flammable neck scarves are not authorized during flight operations. Scarves are not to be worn in ejection seat aircraft. Scarves made of fire-retardant material or 100 percent cotton may be worn in non-ejection seat aircraft.
 - 5.4.2.2. Gloves, Flying, Nomex, GS/FRP-2 will be worn.
 - 5.4.2.3. Boots, Flight, Leather. Lace-up zipper inserts may be used in ejection seat aircraft. Jungle boots should not be worn as they provide no ankle support during PLF and provide no protection during fires.
 - 5.4.2.4. Jacket (CWU-36/P, CWU-45/P). Wear when climatic conditions dictate. The A-2 leather flight jacket provides no protection during fires and should not be worn during flight.
 - 5.4.2.5. Anti-Exposure Suit. Units may provide quick don anti-exposure suits for passengers and crew for aircraft with multiple engines and multiplace rafts. Crewmembers on ejection seat aircraft must wear constant wear anti-exposure suits on any preplanned overwater flight when the water temperature is 60oF (15.5oC) or less. If the water temperature ranges between 60oF (15.5oC) and 51oF (10.5oC), and the local air temperature is 70oF (21.2oC) or greater, the unit commander may waive or extend the anti-exposure suit requirement after considering the following factors:
 - 5.4.2.5.1. Climate zone and existing weather throughout the range of flights (refer to TO 14P3-5--1/91).
 - 5.4.2.5.2. Operational requirements.
 - 5.4.2.5.3. Number and type of aircraft participating in the sortie.
 - 5.4.2.5.4. Time of flight over water.
 - 5.4.2.5.5. Distance from land.
 - 5.4.2.5.6. Mission altitude.
 - 5.4.2.5.7. Risk, based on type of sortie.
 - 5.4.2.5.8. Degree of surveillance over mission.
 - 5.4.2.5.9. Location, availability, and capability of search and rescue (SAR) forces.
 - 5.4.2.5.10. Winds and wave height and their impact on SAR operations.
- **5.5.** Aircraft Installed Life Support Equipment Procedures. As a minimum, units will maintain aircraft life support equipment specified in Table 5.1. Some aircraft configurations may require additional equipment. Therefore, the appropriate aircraft 55-series regulations should be used to ensure all mission specific requirements are met. In the event that life raft inspections come due during off station missions, it is permissible, in coordination with home station maintenance, to allow a one-time flight back to home station.

- 5.5.1. Aeromed Missions. When applicable, position a sufficient quantity of MB-1 casualty life preservers aboard aircraft to accommodate all adult litter patients. Passenger type life preservers may be used in lieu of MB-1 life preservers for walking patients without casts or other encumbrances.
- 5.5.2. KC-135 Life Support Equipment.
 - 5.5.2.1. Five personnel parachutes, ML-4 survival kits, and survival vests will be prepositioned on each aircraft. Survival kits will be attached to the parachute buckles and hung in the rear of the aircraft. Aircraft commanders will direct repositioning of life support equipment based on mission need, however it must be readily accessible. Crewmembers will return the parachutes/kits to their primary position following mission completion.
 - 5.5.2.2. The SRU-21/P survival vests and ML-4 survival kits will contain the components specified in Attachments 5 and 6, respectively.
 - 5.5.2.3. Live Aboard Accommodations. Units with a SIOP mission will establish aircraft live aboard capability consisting of Live-Aboard-Kits (LAKs), rations, and water. This will allow SIOP aircrews to reside on the aircraft at forward locations should the situation arise. LAK components are listed in Attachment 7. This requirement may be satisfied using the MD-1 survival kit with sleeping bags, rations and water installed.
 - 5.5.2.4. Each organization will have sufficient LAK capability (plus spares) for all aircraft committed to SIOP. LAKs can be built using A-3 bags/A-21 canvas containers/or equivalent. The inner containers should be assembled with rigid reinforced fiberboard boxes or equivalent. Kits and contents will be inspected annually and documented on AFTO Form 338 (Survival Kit Record) or automated equivalent.
 - 5.5.2.5. Sustenance. Unit life support should work with the Morale Welfare Recreation Services (MWRS) Officer to establish a Memorandum of Understanding (MOU) for ordering and issuing of Rations Cold Weather (RCWs) for SIOP aircraft. As the primary focal point for all subsistence, the MWRS Officer must approve all subsistence requests for rations.
 - 5.5.2.6. Responsibility for subsistence rations and water is contained in AFRs 145-1 and AFI 25-101. Due to the lack of proper refrigeration storage facilities within life support shops, some rations will require courtesy storage at appropriate facilities.
- **5.6. Aircrew Helmets and Oxygen Masks.** Helmets are required for PACAF aircrews for head protection during emergency bailout, for performing some flight duties (e.g., flight engineer) or when required for helmet mounted accessories e.g., night vision systems, or nuclear flash protective devices.
 - 5.6.1. PACAF life support sections will not warehouse or act as a facility for the initial issue of flyer's helmets, oxygen masks, or related subsystems for crewmembers. These items are initially procured through Base Supply Individual Equipment Unit (IEU), using flying squadron funding and are to be placed on the crewmember's AF Form 538 (Personal Clothing and Equipment Record).
 - 5.6.2. Only helmets approved through formal test-and-evaluation processes (e.g. HGU-55/P or SPH-4AF, etc.) are authorized for use by PACAF crewmembers.
 - 5.6.2.1. Helicopter aircrews should use the SPH-4AF helmet because of its added retention/crash protection and as a night vision goggle platform. The HGU-55/P helmet is authorized for helicopter use. However, the SPH-4AF is the preferred helmet. PJs may utilize the AF approved jump helmet.

- 5.6.3. HGU-55/P helmets will remain gray in color which is considered camouflaged/subdued.
- 5.6.4. When helmets are not required for daily use, they should be stored in the life support shop.
- 5.6.5. Headstraps (P/N 249-363) may be used as mask suspension assemblies for crewmembers not requiring helmets.
- 5.6.6. All AECMs performing basic crew duties on actual or training aeromedical evacuation missions will be provided individually issued oxygen masks unless aircraft are configured with prepositioned assets. These oxygen masks/systems may be issued on a temporary basis for the duration of the missions. AECM oxygen masks in excess of daily mission requirements, but required for contingencies, may be placed in serviceable storage IAW applicable TOs and this regulation.
- 5.6.7. Prepositioned aircraft installed oxygen mask will be removed from the aircraft and inspected, cleaned, and disinfected in the Life Support section every 90 days.
- 5.6.8. Crew Chief and Fuels Personnel Helmets/Oxygen Masks. The following procedures will be followed when requirements exist for these helmets and oxygen masks:
 - 5.6.8.1. A maximum of two crew chiefs per aircraft may be fitted/issued helmets/masks. The minimum number of fuels personnel helmets will be decided by WG/SQ/LG.
 - 5.6.8.2. Procedures will be established for departing/replacement personnel to pick-up or turn-in helmets when no longer required.
 - 5.6.8.3. Limit the change-out of flying crew chiefs and fuels personnel to a minimum.
 - 5.6.8.4. Arrange for helmet/mask maintenance. Pick-up and fitting prior to flight/alert is the owner's responsibility. Parts purchase for initial helmet buildup is the maintenance organization's responsibility. Repair parts required during routine maintenance will be supplied by life support.
- 5.6.9. Aircrew Laser Eye Protection (LEP).
 - 5.6.9.1. Each at risk aircrew will have a three-wave length day-only LEP visor available for use. The "Barnes" visor (NSN 8475-01-295-4011LS & 8475-01-295-4012LS) is the only approved LEP for Air Force use.
 - 5.6.9.2. Aircrews will receive hands-on training prior to their initial LEP flight. As a minimum, training should address the following:
 - 5.6.9.2.1. Look at the instrument panel and HUD through the LEP device. Some aircrews may report a decreased capability to see as much blue light through the LEP device as compared to the standard sun visor.
 - 5.6.9.2.2. Observe clouds, trees and other aircraft. Make a mental note of the contrast differences between the LEP device and the standard sun visor.
 - 5.6.9.3. The LEP operational concept is:
 - 5.6.9.3.1. Wear the devices when directed by this regulation, or unit commanders.
 - 5.6.9.3.2. Wear LEP visors when in the vicinity of a known/suspected laser source.
 - 5.6.9.3.3. Do not intentionally look at a known or suspected bright light/laser source.
 - 5.6.9.3.4. Go "head down" if the cockpit is illuminated by any bright light source.

- 5.6.9.4. Report any bright light or suspected laser incidents. Aircrews will also report to the flight surgeon for an eye examination.
- 5.6.9.5. Life support technicians will employ the following combined maintenance/quality assurance concept:
 - 5.6.9.5.1. Record all inspection and historical data on a separate AFTO Form 334. LEP visors not installed on helmets will be inspected at the following intervals: initial, prior to installation, and in conjunction with the helmet it is installed on.
 - 5.6.9.5.2. Make detailed notes of any observed imperfections (i.e., scratches, pits, or chips). Also look for trapped air and uneven coloration in the lenses. Any visible distortion is cause for rejection. Rejected lenses will be reported to HQ PACAF/DOTT.
 - 5.6.9.5.3. Each visor will be assigned a local control number permanently affixed to the edge beading of the lens, etched on the snap fastener, or temple pieces.
 - 5.6.9.5.4. Configure aircrew helmets with LEP visors when directed and prior to the aircrews stepping to their aircraft. Issue configured helmets and protective LEP visor covers to each aircrew. The aircrews are responsible for covering the LEP visors with the protective covers upon mission termination.
 - 5.6.9.5.5. Store the LEP devices in their protective covers.
 - 5.6.9.5.6. Take every reasonable step to minimize scratching the devices.
- 5.6.10. HIGH CONTRAST VISORS (HCV). Approved cockpits are listed in 14P3 series TOs.
 - 5.6.10.1. HCV are not authorized for use in conjunction with any other optical device (tinted visors, LEP, sunglasses, etc.) other than clear, prescription spectacles/contact lenses.
 - 5.6.10.2. HCVs are authorized for day time use only and are authorized for use by aircrews who have their color vision validated as normal by the flight surgeon.
 - 5.6.10.2.1. A listing of aircrews who are not authorized to wear the HCV will be maintained by the flight surgeon and copies provided to the life support shop. Only aircrews not on this listing will be issued HCV.
 - 5.6.10.3. Do not wear HCVs during take-off or landing because yellow runway markings may disappear.
- **5.7. Survival Accessory Containers.** Aircraft will have the type and quantities of survival kits authorized in TO 14S3-1-3, this regulation, and the aircraft operational flight manuals. Each specified kit will contain all of the mandatory components identified by an asterisk (*). All components listed in Attachment 8 are considered mandatory for individual survival kits (i.e., ACES II). Optional items listed in TO 14S1-3-51 will be restricted to signaling devices, escape and evasion items, or items that are related to local climatic conditions. Guard against over-packing. Commanders may add other authorized components by supplementing this regulation. Forward any proposed supplements to HQ PACAF/DOTT for approval before publication. Do not choose those optional items which are packed in survival vast. The reverse side of the DD Form 1574 attached to all survival kits and multi-person life rafts will reflect lot numbers and expiration dates of all pyrotechnics.

- 5.7.1. Survival Accessory Components. Survivor 35/Survivor 06 Demineralizer, Reverse Osmosis pumps are authorized in multiplace life raft accessory kits. This equipment may be used as a partial substitute for packaged water. When used as a substitute, a minimum of 60 ounces of water will remain in 20-person life rafts and 10 ounces of water for individual kits.
- 5.7.2. Each wing will arrange to have survival food packets inspected by the base Environmental Health Service personnel as required by published Air Force Policy Letter, USAF/SGPA, 20 Feb 90, Inspection Guide for Food Packet, Survival, General Purpose (until publication of DPSC Handbook Appendix E.).
- 5.7.3. Protecting Clothing Kit (PCK). PCKs contain protective clothing for use by aircrews during emergencies aboard aircraft carrying hazardous cargo as outlined in AFR 71-4. Neutralizers for corrosive agents are not part of this kit. Each PCK will contain the components listed in Attachment 5.7. Pack and seal PCKs in a locally manufactured metal or fiberglass container not to exceed 12" x 18" x 24".
 - 5.7.3.1. Visually inspect the contents of the kit every 12 months. Record these inspections on an AFTO Form 338. Affix a DD Form 1574 to each kit showing the inspection due date.
 - 5.7.3.2. Stencil each PCK with at least 1-inch letters with the following:

KIT

PROTECTIVE CLOTHING

EMERGENCY USE FOR IN-FLIGHT

HANDLING OF HAZARDOUS CARGO

ACIDS, TOXIC MATERIALS,

CLASS B AND C POISONS

- **5.8. Survival Vests** (**SRU-21/P**). Survival vests are a mandatory requirement for all PACAF aircrews in or deployable to a high threat area. See Attachments 5 and 5.1 for a listing of components.
 - 5.8.1. Units may add additional survival items to meet mission requirements. Personal items will not be stored in survival vests. Because of potential pilferage, survival vest security procedures will be established when survival vests are prepositioned on the aircraft. Survival vest pocket positioning is a unit option.
 - 5.8.2. Specify survival vest component locations in wing supplements to this regulation. Locate items/pockets to optimize life support equipment integration (i.e., LPU-9/P and ACDE equipment). Insure aircrew safety is not impaired and that any aircrew discomfort is minimized.
 - 5.8.3. Vests contents will be inspected every 30 days. Vest worn only during exercises and mobility assets will be inspected every 120 days. All vests will be postflight inspected following each use (ANG exempt). All survival vest installed radios will be checked for serviceability using the TS-24B tester during inspections.

5.9. Flotation Equipment:

- 5.9.1. Life Preservers. LPUs will be worn in ejection seat aircraft on all flights. Other PACAF aircraft scheduled to fly over water will have an approved emergency flotation device on-board and within reach of each seated occupant.
 - 5.9.1.1. Non-ejection seat crewmembers may use passenger type life preservers when parachutes are not being worn, but only the LPU-2/P or LPU-10/P aircrew life preserver will be worn in conjunction with the parachute.
 - 5.9.1.2. The Adult/Child (A/C) (P/N A-A-50652) life preserver may be used on all passenger carrying missions. Authorizations for A/C preservers are depicted in Table 5.1 and will not be used to substitute other requirements. The LPU-6/P infant cot is required for infants 18 months of age and younger.
 - 5.9.1.3. When life preservers are packed in A-3 bags, seal the bag and attach a completed DD Form 1574.
- 5.9.2. Life Rafts. Types and quantities for each aircraft are specified in TO 14S3-1-3. Multiplace rafts will be equipped with components listed in TO 14S-1-102.
- **5.10. Anti-Exposure Suits.** Aircrews requiring anti-exposure protection may wear the CWU-74/P (CWU-21 series may be used until exhausted), CWU-16/P or MAC 10 (helicopter only).

5.11. Anti-G Protection:

- 5.11.1. Anti-G garments will be worn on all ejection seat aircraft. Navy and other services anti-G garments are not authorized in USAF aircraft. All F-16 aircrews will be briefed on G suit/knee interference with the F-16 side stick.
- 5.11.2. IAW the current FCIF, once equipment is received and aircrews are qualified, Combat Edge (CE) equipment will be worn in all CE modified aircraft except for cross country, deployments, and dedicated instrument sorties. Current guidance will be published in MCI 11-F15 Vol 3 and 11-F16 Vol 3 or FCIFs. The CRU-93 regulator will be put in the PPB mode only when wearing CE equipment. CE modified aircraft will use the CRU-93 ON MODE when using AERP or other non-CE equipment (i.e., redball where MBU-20/P mask must be exchanged for MBU-12/P). The CRU-94/P will be removed for real world chemical flights if aircrews use the CRU-80/P and MBU-13/P or the AERP system. Training sorties with the MBU-13/P will use the CRU-94 connector. CRU-60/P connectors will not be utilized on CRU-93 regulators.
- **5.12. Emergency Radios.** The PRC-90-2 and PRC-112 series radios are the primary survival radios for PACAF. Radios will be packed with the volume control adjusted to the lowest setting.
- **5.13. Thermal Flash Protective Devices (TFPD).** Required for all aircrews on SIOP missions. Requirements for TFPD will be satisfied by either the MIL-G-635 or PLZT goggles at the wing commanders discretion. On aircraft that are PLZT modified, it is recommended that the PLZT goggles be used.
 - 5.13.1. Flash blindness goggle kits (MIL-G-635) will consist of one container, one complete pair of goggles, one KMU-219/P modification kit, and one monocular eyeshield. Place a piece of shock absorbing material on the bottom of each container with goggles facing down. Protect the lens from

scratches with a piece of flannel cloth, NSN 8305-00-656-1259, or equivalent. One monocular eyeshield will be placed in a polyethylene bag and installed in each goggle container.

- 5.13.1.1. Attach a DD Form 1574 to each container indicating the date inspected and date due.
- 5.13.1.2. As a minimum MIL-G-635 goggle kit quantities will be placed on the aircraft as listed in Table 5.1.
- 5.13.2. EEU-series (PLZT) goggles will be inspected by life support personnel as specified in the applicable TO. Inspections of PLZTs will be documented on the applicable AFTO form and each container will have a DD Form 1574 attached to the outside of the carrying case.
 - 5.13.2.1. Each PLZT container will be modified to accommodate a monocular eye shield by cutting a 3/4 inch deep recess the size of the eye shield in the upper right portion of the lid cushioning material. Eye shields will be stored face down in the foam cut-out, and with a slight loop in the elastic string.
 - 5.13.2.2. Life support technicians will ensure serviceability of the PLZT top latch helmet mount and power cable assemblies concurrent with the helmet inspections.
- **5.14. Aircrew Restraint Harnesses.** The PCU-17/P restraint harness and HBU-6/P safety strap are the only restraint devices authorized for use on PACAF aircraft. Aircrew restraint harnesses and safety straps will be inspected by life support IAW TO 13A1-1-1 and documented on the applicable AFTO Form.
 - 5.14.1. Restraint harnesses will remain with the aircraft during depot level maintenance.
 - 5.14.2. All PCU-17/P restraint harnesses, except for C-9 aircraft, will be equipped with an oxygen connector mounting plate (NSN: 1660-00-656-2522).
- **5.15.** Back/Chest Parachutes. Life support will maintain sufficient parachutes to meet the unit's most probable wartime mission requirements and mobility contingencies.
 - 5.15.1. Equip all parachutes with emergency locator beacons, automatic releases, and hook-blade knives. NOTE: As a minimum, 50 percent of a unit's personnel parachutes will be equipped with emergency radio beacons. The target is for 100 percent of the parachutes to have beacons installed.
 - 5.15.2. Oxygen connector mounting brackets and emergency oxygen cylinders will be installed on all KC-135 parachutes. All other parachutes will have oxygen cylinders and connector brackets installed to meet their unit's most probable wartime tasking. For example, units with special missions will maintain sufficient parachutes with emergency oxygen cylinders installed to meet a High Altitude Low Opening (HALO) capability plus quantities sufficient for any Design Operational Capabilities (DOC) statements. Oxygen connector mounting brackets installed on parachutes for use with ACDE connectors must be located on/below the chest strap IAW TO 14P3-1-131.
 - 5.15.3. Life support will install PCU-10/P personnel lowering devices (PLDs) on their parachutes IAW local mission requirements/directives determined by the unit commander.
 - 5.15.4. The SDU-5/E strobe light, flashguard and infrared filter will be installed on all parachutes. Also, AFP 64-15 and the SRU-16/P Minimum Survival Kit will be installed on parachutes and torso harnesses. These items may be installed on the survival vest at the option of the unit. These items are not required to be duplicated between the survival kit, torso harness, or survival vest.

- **5.16. Aircrew Night Vision Systems (ANVS).** Life support is responsible for ANVS fitting/maintenance. ANVS will be stored in a secure area when not in use and issued to crewmembers using an appropriate tracking system. A ledger may be used to document problems encountered during flight or maintenance required for ANVS.
 - 5.16.1. Aircrew will be trained by the flight surgeon on the ANVIS limitations and be tested to meet minimum visual acuity standards.
 - 5.16.2. ANVS helmet mounting brackets will be installed IAW technical order guidance.
 - 5.16.3. Aircrews will be trained to remove ANVS prior to ejection/bailout.
 - 5.16.4. Units issuing ANVS goggles will have eye test lanes for aircrew preflight adjustments and will ensure life support technicians are available to assist aircrews in preflighting/adjusting ANVS.
 - 5.16.5. Turn-in of unserviceable ANVS night image intensifier tubes (IIT).
 - 5.16.5.1. Turn-in IITs under warranty to supply and ship to the Naval Surface Warfare Center, Crane Division, RIC P-64, with DD 1348-1 comments block marked for code 8053, BLDG 2521, MFG code IH (Army Assets), NAVSURFWARCENDIV, 300 Highway 361, Crane IN 47522. DD Form 1348-1 columns 45 through 50 code will be marked with N00164 and columns 67 through 69 will be marked B16.
 - 5.16.5.2. Obtain a Return Authorization Number through POC at DSN 482-4872 or commercial 812-854-4872. Provide the following information: NSN of failed ITT, date of failure, reason for failure, serial number of ITT, warranty expiration date, contract number and cage code.
 - 5.16.5.3. Obtain a turn-in document number and transportation fund cite from the item manager at DSN 468-5205.
 - 5.16.5.4. ITTs not under warranty will be turned in through supply channels condition code F and returned to FB2065, Robins AFB, GA 31098, marked for Unserviceable Stock.
 - 5.16.6. F4949 NVGs have a 2 year warranty. If F4949 ANVS cannot be repaired by life support using Level 2 maintenance procedures, contact Jean Brooks at the WR-ALC, DSN 468-5219, for disposition instructions.
- **5.17. Aircrew Chemical Defense Equipment (ACDE).** ACDE status will be reported to PACAF/DOTT (ANG exempt).
 - 5.17.1. Aircrew Requirements. All crewmembers (including staff personnel assigned to flying duties) in or deployable to chemical threat areas will be fitted and equipped with ACDE based on USAF War Mobilization Plan Annex J and unit DOC statements. ACDE authorizations are specified in Table of Allowance (TA) 016C and this PACAFI. Each aircrew member is authorized three IACC ensembles, 4 of the older ensembles or a combination of the two. Until aircrews attain 3 IACC, 4 ensembles will be maintained (i.e. 2 ea IACC and 2 charcoal suits).
 - 5.17.2. Life support responsibilities: Life support is responsible for requisitioning, fitting, and maintaining ACDE.
 - 5.17.2.1. Record ACDE inspections on the applicable AFTO form. Pressure sensitive tape may be used to record inspection dates on equipment items.

5.17.3. Life support will assume storage responsibility for ACDE if sufficient storage space is available in or near the work area.

5.17.4. ACDE Procedures.

- 5.17.4.1. Filter Element Replacement Procedures. CRU-80/P filter packs will be built-up with filter elements installed. The filter elements will be changed IAW TO 14P4-1-151.
- 5.17.4.2. EXCEPTION: To allow rapid launching of initial deploying multi-place aircraft aircrews, some CRU-80/P filter packs may be built-up with filter elements installed. Built-up CRU-80/P filter packs must be placed in zip lock bags and stored in an environmentally controlled facility in accordance with TO 14P4-1-151. Built-up filter packs for initial deploying multi-place aircraft aircrews will be disassembled and inspected annually (as TO directed, temperature, or conditions dictate) or as directed by command authorities and have the filter elements changed according to TO 14P4-1-151.
- 5.17.4.3. Crewmembers should use their individually issued/fitted "above-the-shoulder" ACDE for wing exercises and flying type training. Training assets will be utilized whenever available. Units are authorized ten per cent of their requirements for training purposes. See Table 7.1 for explanation of above the shoulder ACDE.
- 5.17.4.4. Operational ACDE will not be used for training that results in damage to war readiness assets (e.g. water survival training, etc.). Crewmembers will turn-in ACDE to life support immediately after the threat or exercise is terminated.
- 5.17.4.5. Units are authorized to locally manufacture simulated ACDE hoods for ground training purposes by using the HGU-41/P hood as a template.
- 5.17.5. Aircrew Eye/Respiratory Protection (AERP) Equipment.
 - 5.17.5.1. The AERP system is comprised of: one MBU-19/P Protective Integrated Hood/Mask; one CQU-7/P Blower Assembly; six C-2 Filters; six blower batteries; and one MXU-835/P Intercom Unit (lack of intercom units will not impact operational capabilities). The MBU-19/P is designed to interface with the HGU-55/P flight helmet using standard offset bayonet connectors and with the SPH-4A/F using the adapter kit in the T.O. Units requiring non-helmeted MBU-19/P's will order a separate harness assembly and a communications cord to retrofit the hood/mask assembly as a non-helmeted version. Maintenance instructions and illustrated parts breakdowns are contained in TO 14P3-1-151.
 - 5.17.5.2. Units must ensure blower hose lengths specified in T.O. 14P3-1-151 are used in their appropriate aircraft.
- 5.17.6. CWU-66/P or 77/P Integrated Aircrew Chemical Coveralls (IACC).
 - 5.17.6.1. IACCs are replacements for the charcoal undercoverall and are the primary PACAF ensemble. The basic difference is the CWU-66/P is green and CWU-77/P is desert brown. The suits are completely interchangeable.
 - 5.17.6.2. For training purposes, the standard CWU-27/P flight suit adequately replicates the CWU-66/P, 77/P suits. Therefore, IACCs should not be removed from the sealed container for training purposes. However, if individuals are equipped with both types of suits (IACC and charcoal undercoverall), shelter processing training should include both the IACC and charcoal undercoverall.

- 5.17.7. C-9 Aeromedical Evacuation Crew Members (AECM). The quantity of ACDE authorized for AECMs will be standard aircrew authorizations.
- 5.17.8. Flying crew chiefs are not authorized ACDE. Crew chief chemical protection is provided with the ground chemical defense ensemble. Maintenance of ground ensembles is not a life support function but rather a shared individual and unit responsibility.
- 5.17.9. Aircrew Chemical Defense Equipment Information. ACDE requirements are specified in Table 7.1. Commanders must consider the potential for excessive thermal burden induced when wearing the full or partial ACDE. Aircrews wearing ACDE (full or partial) should terminate training missions when symptoms of nausea, dizziness, blurred vision, "gray out", hot spots, clamminess, etc., are experienced. The following preventive measures are recommended:
 - 5.17.9.1. Drink more water than thirst dictates to prevent dehydration.
 - 5.17.9.2. Don equipment just prior to stepping to the aircraft.
 - 5.17.9.3. The canopy may be kept open to enhance comfort during ground operations. Enforce canopy limitations (i.e., taxi speed).
- **5.18. Issue and Wear of Aircrew Weapons.** Aircrews will be issued weapons and ammunition IAW AFMAN 31-222 and AFI 31-207.
 - 5.18.1. Aircrews will wear weapons on survival vests, web belts (non ejection seat), or shoulder holster IAW TO 14S1-3-51.
 - 5.18.2. Life support personnel will only be responsible for custody and issue of aircrew weapons and ammunition during all contingency/flying exercises.
- **5.19. Aero Clubs.** Life support equipment may be loaned to Air Force aero clubs on a temporary basis if not immediately required for operational needs IAW AFI 34-117.

5.20. Equipment Inspection and Maintenance:

- 5.20.1. AFSC 1T1X1 Inspection Qualification.
 - 5.20.1.1. Only certified personnel possessing AFSC 1T1X1 in a skill level of five or higher will accomplish the inspection, maintenance, repair, installation, and removal of ejection seat installed survival kits and personnel parachutes after certification or recertification requirements in AFI 21-112 are met. Personnel possessing AFSC 1T131 and certified in accordance with AFI 36-2201 and AFI 21-112 may assist in the task provided the second technician is a five level or greater and Red "X" certified. Egress personnel (AFSC 2A673) may assist life support during mobility deployments with the removal and installation of survival kits and parachutes.
 - 5.20.1.2. Life Support personnel will attend a cockpit safety familiarization course on the egress system of assigned aircraft according to AFI 21-112 before performing duties on aircraft ejection systems. Technicians will also be trained and certified by quality assurance personnel in maintenance documentation (TO 00-20-series).
 - 5.20.1.2.1. A certified life support technician (AFSC 1T151 or higher and Red "X" certified) will train technicians to install and remove parachutes and survival kits in ejection seat aircraft. Certification will be accomplished as required by AFI 21-112.

- 5.20.1.3. Red "X" certification and decertification for installation and removal of parachutes and survival kits will be accomplished by OG/CC or his designated representative.
 - 5.20.1.3.1. Red "X" certification of life support personnel will be accomplished as follows:
 - 5.20.1.3.1.1. Technician will be trained by certified personnel.
 - 5.20.1.3.1.2. Technician will be evaluated by OG/LSS and certified for red "X". The performance evaluation and certification will be documented on an AF Form 1098 and an AF Form 2419, or equivalent, and placed in the individual's OJT Record.
 - 5.20.1.3.1.3. Units with CAMS will load and track this certification via the CAMS certification roster. Units without CAMS will forward a letter of certification to the operations group commander for approval.
 - 5.20.1.3.1.4. Forward copies of the approval letter to the logistic group commander and the chief of quality assurance. Maintain a copy in each squadron life support section.
- 5.20.1.4. Life support personnel certified IAW AFI 36-2201 are also authorized to inspect munitions (flares) for visual defects and to perform minor corrective actions as identified in Table 5-1, T.O. 11A10-26-7. (Reference T.O. 11A-1-10, para 2-4g).

5.20.2. Survival Kits:

- 5.20.2.1. Use interlocking plastic bags to protect appropriate components.
- 5.20.2.2. Upon delivery of new aircraft, an acceptance inspection will be conducted on aircraft-installed survival kits using TOs 00-20-1, 00-20K-1 and the appropriate kit T.O.
- 5.20.2.3. Inspect and test the survival kit and its components for operational serviceability in accordance with the applicable technical order. Discrepancies will be documented using TOs 00-20-1 and 00-35D-54.
- 5.20.2.4. Each wing will establish standardized procedures to alert life support of an impending aircraft transfer. Prior to transfer of aircraft, inspections will be accomplished on the survival kit and accessories as specified by TO 00-20-1. Units will also adhere to the following procedures: Intracommand/intercommand transfers and programmed depot maintenance will include all mandatory components specified in TO 14S1-3-51 and this regulation. Survival kits and parachutes will have a minimum of 60 days serviceability remaining on the current inspection cycle and six months on time change items when the aircraft departs.
- 5.20.2.5. Using T.O. 14S1-3-51, attach components packed in survival kits to the inner container with 100-pound strength olive drab nylon cord. Make lanyards 30 to 36 inches long. Use a snap hook and a lanyard of 550 cord to attach one end of the survival radio to the inner container.
- 5.20.3. Survival Vest. Inspect and maintain survival vests using T.O. 14S1-3-51.
 - 5.20.3.1. Units will determine if vest are to be worn on a day-to-day basis. Vest will be worn on all combat missions and during operational inspections
- 5.20.4. Survival Radios and Personnel Locator Beacons. Inspect and maintain survival radios and beacons using 31R- and 14S-series technical orders. Set beacons on the continuous mode (unless combat conditions dictate otherwise).
 - 5.20.4.1. Dispose of batteries in accordance with TO 00-25-213.

- 5.20.4.2. Attach a separate inspection label to the radios and batteries to indicate the inspection and battery replacement dates.
- 5.20.4.3. Use Work Unit Codes (WUC) listed in TO 00-25-06-2-1 on the AFTO Form 350, Reparable Item Processing Tag, prior to turn-in of NRTS radios/beacons.
- 5.20.4.4. PRC-112 radios will be stored using two interlocking plastic bags. Secure closures on both bags with nylon filament tape leaving a two inch pull tab. Procedures for channel selection and personal identification codes will be developed by each wing. PRC-112 radios require the highest degree of safe guarding.
 - 5.20.4.4.1. The antenna and acoustical coupler may be stored in another pocket.

5.20.4.5. Parachutes and Torso Harnesses:

- 5.20.4.5.1. Inspect and maintain parachutes and torso harnesses in accordance with 14D-series technical orders. Life support personnel will perform the 30-day inspection on aircraft-installed parachutes.
- 5.20.4.5.2. Accomplish a quality assurance inspection on all parachutes/torso harnesses after being repacked/serviced by the survival equipment section.
- 5.20.4.5.3. Preflight inspections by life support personnel are not required on parachutes prepositioned aboard aircraft.
- 5.20.4.5.4. Life support personnel will remove/install aircraft-installed parachutes and survival kits for periodic inspections.
- 5.20.4.5.5. Prepositioned and ejection seat installed parachutes will be inspected and repacked during the aircraft acceptance inspection when a new aircraft arrives or when an aircraft returns from an off station depot facility or modification line.

5.20.4.6. Anti-Exposure Coveralls:

- 5.20.4.6.1. AFSC 2A7X4 will inspect quick-donning anti-exposure coveralls (CWU-16/P) IAW TO 14P3-5-61.
- 5.20.4.6.2. Constant-wear anti-exposure garments will be fitted, inspected, and maintained by life support personnel using the applicable technical data. Postflight inspection of the CWU-21/P series, and CWU-74/P anti-exposure coveralls will be accomplished using the requirements of T.O. 14P3-5-91, para 5-3. The 180-day water test is not required.
- 5.20.4.6.3. AFSC 2A7X4 will accomplish repair/time compliance technical order (TCTO) modifications on all anti-exposure coveralls.
- 5.20.4.7. Life Preservers and Life Rafts. AFSC 2A7X4 will inspect life preservers and life rafts using TO 14S-1-102. Use the inspection frequency specified in the appropriate T.O. Life preservers will be worn in ejection seat aircraft on all flights.
- 5.20.4.8. Anti-G Garments (CSU-13 series suit and CSU-17/P vest):
 - 5.20.4.8.1. Inspect the primary anti-G garments every 30 days, the backup every 90 days (ANG 120 days for both). Fit check the primary CSU-13 series suit and the CSU-17/P vest every 90 days (ANG 180 days). Fit check the backup suit prior to initial use and every 90 days thereafter. Record inspection and flight data on separate AF Forms 335, Anti-G and Constant

Wear Anti-Exposure Suit Inspection Form. The CSU-17/P vest will be fit checked within 10 days after the initial fitting.

5.20.4.8.2. Life Support personnel will inspect, maintain, and launder/clean anti-G garments. Aircrew members may launder/clean the anti-G garment if procedures in TO 14P3-6-121 are followed and life support personnel perform a complete inspection after cleaning and prior to the next flight.

5.20.4.8.3. AFSC 2A7X4 will accomplish TCTO modification (i.e., cutting, sewing, etc.). With the exception of the MC-1 knife/riser cutter knife, attach no additional items or pockets to the anti-G garment unless authorized by appropriate technical orders.

5.20.4.9. Oxygen Masks and Helmets:

- 5.20.4.9.1. Life Support personnel will inspect all in-service oxygen masks and helmets in accordance with appropriate technical orders. LSS will designate procedures for storage of oxygen masks and helmets.
- 5.20.4.9.2. Four-point suspension is mandatory for oxygen masks of aircrew members flying ejection seat aircraft. Place the buckles above or below the strap as required to aid in fitting and to avoid interference with the visor lens, bayonets, restraint straps, and aircrew vision.
- 5.20.4.9.3. Postflight Inspection. All aircrew members will return their oxygen masks and helmets to a designated postflight area. Life support personnel will perform the postflight inspection on the oxygen mask, helmet, anti-G garments, harness, and vest using appropriate technical orders. (ANG KC-135 exempt)
- 5.20.4.9.4. The MBU-12/P or MBU-20/P for COMBAT EDGE is the standard aircrew mask. All efforts will be made to eliminate use of the MBU-5/P. This will decrease the requirement for additional benchstock and supplies if the MBU-5/P can be eliminated.
- 5.20.4.9.5. Prepositioned aircraft installed oxygen mask will receive a complete disassembly and cleaning at least every 90 days. These mask will be removed from the aircraft and taken to the life support section for disassemble, inspection, cleaning and disinfecting. Units will ensure 30-day mask inspections of prepositioned aircraft installed mask consist of removing the masks from the aircraft with inspection, cleaning, and disinfecting accomplished in the life support section, not on the aircraft.

5.20.4.10. Oxygen Mask Connectors:

- 5.20.4.10.1. Use the MH-2 tester for testing CRU-60/P connectors. The MQ-1 tester is authorized for interim use when the MH-2 is unavailable and on AZ 02 backorder status. The TT 529/E will be used to test the CRU-94 Combat Edge Connector.
- 5.20.4.10.2. Store oxygen connectors in A/OA-10, F-15, and F-16 aircraft. Pull-test these connectors at the aircraft in accordance with TO 15X5-4-1-101 and in conjunction with the routine parachute inspection. In cold weather environments where the temperature may reach -20 degrees and below the connectors may be kept on the harness as these cold temperatures cause the connection to be difficult. Units will develop procedures in their local supplements to address these situation. Situations of switching the connectors from harness to aircraft may cause confusion for crewmembers.

- 5.20.4.11. Firefighter Smoke Masks. Inspect and maintain smoke masks using 15X-series technical orders.
- 5.20.4.12. Egress Training Devices:
 - 5.20.4.12.1. Wing life support is responsible for operational control and supply accountability of egress training devices.
 - 5.20.4.12.2. All trainers must be accurate replicas of operational cockpits. Trainers must function properly to ensure realistic training. Process servicing and repair/maintenance requirements through the maintenance operations section IAW MCR 66-5, paragraphs 12-1 and 12-5.
- 5.20.4.13. Selected Calendar Time-Change Items:
 - 5.20.4.13.1. Prepare forecasts annually using TOs 00-20-9 and 00-20-9-1.
 - 5.20.4.13.2. LSO/LSS will consolidate unit forecasts (excluding munitions items) into one input. Use the reporting procedures directed by HSC/YAD. Forward inputs directly to HSC/YAD with info copies to HQ PACAF/DOTT.

5.20.4.14. Munitions:

- 5.20.4.14.1. Prepare an annual forecast when directed by the Munitions Accountable Systems Officer (MASO) and IAW the local wing munitions customer regulation. LSO/LSS will review the annual forecast for accuracy and adequacy prior to submission to Munitions Operations (AFK) and HQ PACAF/DOTT.
- 5.20.4.15. If required, supplemental/out-of-cycle changes to the initial forecast must be coordinated through the MASO and submitted to the MAJCOM functional manager for approval. All munitions requirements/allocations will be approved by AFMC, Directorate of Material Management, OO-ALC, and HQ USAF/LGMW. It is imperative that the initial requirements statement be accurate since this document supports DOD budget initiatives.

Table 5.1. PACAF Multiplace Aircraft Configuration.

Minimum Required Equipment	H-60 UH-1	C-9	C-12	C-21	C-130	E-3	VC-135	KC-135
Mask, -358 Series NOTE: a		3	2	2	4	5	7	2
Fire Fighters Sm. Mask NOTE: b		1			2	6	8	2
AWACS MBU-12/P/ 5/P NOTE: b		5				22	2	
EEBD/PBDs		8	2	2	3		2	2
Passenger Oxygen Mask		67	10	10		25	47/28	
Passenger Oxygen Kits NOTE: f					30	10	6	20(40f)
Protective Clothing Kit (PCK)					1			1

Flash Blind Goggle, EEU-Series NOTE: k								4(k)
Flash Blind Goggle, Mil-G-635					4			
Harness, Restraint, PCU-17/P		1			4	1		
Parachute, BA-18/22	d				7 ANG 6			5
Life Raft 7-Person LRU-1/P 9-person T-9 12 person LRU-14A/A NOTE: e	1/1		1	1				
Life Raft 20-Person (F2B) NOTE: f		3d			4	2		1 (2f)
Life Raft 46-Person							1	
Life Pres. Adult/Child (A/C) or		50 or	10	10	70		40	20 (40f)
Life Pres. LPU-5/P		50						
Life Pres. MD-1 (Child) NOTE: c								
Life Pres. LPU-6/P (Infant)		5		2	4		2	(5f)
Life Pres. LPU-2/P or LPU-10/P	2/12				10	40		5
Life Pres. MB-1 (Casualty)		20			2			2
Survival Kit, MD-1, ML-4								5
Minimum Survival Kit NOTE: j	0/1	1	1	1				
Anti-Exposure Suit, CWU-16/P		8			7	40		
Survival Vest					6	_		5 H
Live Aboard Accommodations Note g								i H

Minimum Aircraft Life Support Equipmenta. Preferred PACAF aircrew oxygen mask. Use of MBU-10/P's, MBU-5/P's, and Fire Fighters Smoke Mask is authorized until receipt of P/N 358-1506 series oxygen mask. C-12 aircrew oxygen masks are P/N 359-A1613. C-21 aircrew oxygen masks are Puritan Bennett P/N 174145-02. C-21 Puritan Bennett masks do not have the goggles attached to the mask.

- b. Mask may be replaced by P/N 358-1506 series oxygen mask w/goggle installed.
- c. The only authorized mix of LPU-5/P's and Adult Child (A/C's) life preservers, is the replacement of MD-1's with A/C's on aircraft equipped with LPU-5/P's. Otherwise, no mix of A/C's and LPU-5/P's is authorized.
- d. As required by mission directives. When required, HH-60 helicopters will use B-20 parachutes.
- e. Either raft may be used. Add an additional raft or the appropriate number of ML-4 survival kits when crew and number of passengers exceed the raft's carrying capacity.
- f. For KC-135 tanker configurations of Tanker Task Force (TTF), Channel Missions, OD (Overseas Deployer), add additional equipment in () parenthesis. For PT (permanent transfers) minimum equipment loads will be transferred. Vacuum packed 20-man will be substituted when available.
- g. KC-135 aircraft with SIOP taskings will preposition one (1) Live-Aboard-Kit of 6 MD-1 Kits per aircraft.
- h. C-12 Companion Trainer Program (CTP) life support units will maintain at least one life raft to support mission contingencies. C-12 aircraft may use LRU-14A/A or T-9 life raft.
- i. See PACAFI 11-301 paragraph 5.5.2.5. Preposition 60 MREs and 96-100 cans of packaged water per aircraft when required.
- j. Minimum Survival Kit components (see Attachment 10).
- k. Requirement may be satisfied with MIL-G-635 goggles. If aircraft are modified PLZT should be used.

Chapter 6

LIFE SUPPORT TRAINING

- **6.1. General.** This chapter outlines training responsibilities and requirements of PACAF Aircrew Life Support and technician training programs.
 - 6.1.1. Commanders will:
 - 6.1.1.1. Ensure compliance with the provisions set forth in this regulation.
 - 6.1.1.2. Restrict any crew member from flying who does not demonstrate required proficiency or fails to maintain required training currency.
 - 6.1.1.3. Ensure the LSOs are the primary egress systems continuation trainers. LSS and SERE training instructors will be the primary instructors for life support, SERE, and survival training.
 - 6.1.2. Operations Support Squadron: LSO, LSS, and training NCOIC serve as the focal point for the wing life support/survival continuation training program. Responsibilities include:
 - 6.1.2.1. Establish and supervise a wing life support aircrew training program. Ensure ALL INSTRUCTORS are initially certified (and annually thereafter) to conduct life support training. Certification will be documented on AF Form 1098 (letter for officers) or equavilant form. ALL enlisted instructors assigned will also be certified in all ACD operations and augment flying units during local exercises.
 - 6.1.2.2. Ensure a training classroom is available and is of adequate size/location to provide a positive distraction-free learning environment for aircrews and passengers.
 - 6.1.2.3. Ensure accurate lesson plans are developed IAW AFI 36-2236.
 - 6.1.2.4. Weapon System Team Chiefs (WSTC) will annually review and certify life support continuation training lesson plans. The WSTC will collect all suggested improvements from all using wings and consolidate valid inputs into the core lesson plan. The WSTC will coordinate updates/revisions of lesson plans with using units and then forward copies of lesson plans to HQ PACAF/DOTT for final approval.
 - 6.1.2.5. Coordinate with maintenance functions to ensure all life support training devices are operational and maintained in accordance with applicable directives. Necessary modifications must also be accomplished in a timely manner.
 - 6.1.2.6. Provide support as required by AFI 32-2001 to fire protection personnel regarding life support related aspects of aircrew rescue.
 - 6.1.2.7. Coordinate and develop the wing aircrew life support training schedule.
 - 6.1.2.8. Monitor aircrew life support training currency and identify training shortfalls/trends to the training review panel.
 - 6.1.2.9. Coordinate/schedule instructor augmentation requirements when needed.
 - 6.1.2.10. Ensure crew members meet the minimum formal survival training requirements IAW AFI 36-2209 and the training requirements of this regulation.
 - 6.1.2.11. Ensure to the utmost a realistic training environment for all life support training events.

- 6.1.2.12. Ensure crew members designated to conduct ground egress training are current and qualified in the weapon system. The LSO/LSS will conduct no notice evaluations to ensure quality of those instructing aircraft ground egress.
- 6.1.2.13. Ensure all crew members are briefed on changes to life support equipment or new equipment items prior to placing in service.

6.1.3. Squadron LSO/NCOIC will:

- 6.1.3.1. Provide feedback to ensure life support training program remains abreast of mission needs.
- 6.1.3.2. Monitor/ensure crew members life support training currency.
- 6.1.3.3. Life support shops will provide qualified instructor augmentation when required by the OSS LSO/LSS.
- 6.1.4. Training Method. Hands-on performance/certification of all critical tasks is fundamental to meeting PACAF aircrew life support training requirements.
- 6.1.5. Currency. Table 6.1 outlines training frequencies and applicability. Personnel will not perform aircrew flying duties if the requirements of this regulation have not been satisfied. Crew members may perform aircrew duties prior to completing Combat Survival Training (CST), and courses S-V80-A, S-V90-A, or S-V86-A, but will be scheduled to attend these courses at the earliest opportunity.
 - 6.1.5.1. Currency Definitions. Annual will be interpreted as not to exceed 12 months from date of last completion. Biennial will be interpreted as not to exceed 2 years from date of last completion. Triennial will be interpreted as not to exceed 3 years from the date of last completion.
 - 6.1.5.2. In instances where the guidance in this PACAFI conflicts with guidance provided in other instructions, this PACAFI will take precedence for aircrew egress and life support/survival training.
- 6.1.6. Course outlines (see Attachments 6.1-6.7.)
- **6.2. Aircrew Life Support Training.** LSOs and other trainers will use PACAF approved lesson plans developed by the WSTC and validated by all users. These lesson plans will reduce the overhead of developing unit lesson plans, standardize procedures and improve oversight of training. Units may customize the lesson plans to meet unit requirements (ANG may use ANG WSTC approved lesson plans).
 - 6.2.1. Initial life support training will be conducted prior to the first flight to familiarize aircrew members with equipment requirements and local rescue procedures. A local area lesson plan will be developed to include all aspects of survival and rescue within the local area. Initial training will include complete operational theory and standard hands on certification of critical tasks. All aspects of life support training should be covered to the extent necessary to fly locally. Crew members arriving PCS who are qualified in the same weapons system may maintain training currency dates previously established except for initial training.
 - 6.2.1.1. Continuation training will review critical information and changes to the system and certification of all critical tasks. Individuals will satisfactorily complete all tasks prior to completing training.

- 6.2.2. Ejection seat egress and hanging harness training should be conducted concurrently when practical. Situational awareness (dive angles, sink rate, cockpit stresses) training will be accomplished during egress/ejection training. ESA egress must be accomplished by LSO (except for the ANG who will use only highly experienced trainers) and will be conducted on an egress trainer for assigned aircraft. Aircrew members will wear all items of clothing and equipment normally worn during flight. LSO/LSS will work with the local safety office to design and certify parachute training/hanging harness devices.
 - 6.2.2.1. Flight Surgeons: Flight surgeons flying in other than normally assigned weapon systems will receive this training prior to flight (not to exceed 72 hours). This may be extended up to 180 days based on proficiency and the recommendation of unit LSOs.
 - 6.2.2.2. Aircrew members arriving PCS or visiting aircrews, such as IG team members, are not required to accomplish egress and hanging harness training if source documentation of the aircrew's currency can be obtained (i.e. AFORMS) and aircrews are current in the assigned aircraft. However, training on unique local equipment and survival/rescue requirements will be accomplished.
 - 6.2.2.3. Aircrew members previously mission ready/qualified in a given ejection seat equipped aircraft, currently in transition to a different model of the aircraft or undergoing upgrade training in the same type of aircraft, may receive egress/ ejection training every 180 days if the escape systems and procedures are the same in both aircraft models.
- 6.2.3. Non-ejection seat aircraft egress training will be accomplished using the aircraft and aircraft diagram as training aids.
 - 6.2.3.1. Mission ready, qualification, support aircrews or Flight Surgeons: Flight Examiners (FE) and Instructor Pilots (IP) or certified aircrew members may certify training for these personnel.

6.2.4. Water Survival Training:

- 6.2.4.1. When possible, natural bodies of water should be used in lieu of swimming pools. Ensure all safety precautions are considered when preparing training exercises.
- 6.2.4.2. Aircrew members arriving at a new station who require water survival refresher training after that installation has completed training for the year are not considered delinquent until the next annual training period. However, individuals will be scheduled to attend an academic session at the earliest possible time (30 days maximum).
- 6.2.4.3. Helicopter Emergency Egress Device (HEED) Training. This training is required for all helicopter crew members. All PACAF helicopter crew members will attend one time UET class S-V84-A, as specified in AFCAT 36-2223, USAF Formal Schools. As a minimum, crew members will view the UET (606040DF) and "HEED II" PIN (802514DN) videos annually.
- 6.2.4.4. If training is conducted in natural bodies of water,the training frequency for water survival may be extended to 26 months for ESA, or 38 months for NESA and helicopters to allow units to schedule training during the warmer months of the year.
- 6.2.5. Combined Training. Training sessions may be combined to satisfy all requirements (i.e. life support equipment training may be conducted during water survival and combat survival sessions) as long as all objectives are fully accomplished.
- 6.2.6. Passenger Training.

- 6.2.6.1. Passengers (those individuals either non-rated or rated and not currently qualified in the aircraft) in ejection seat/module equipped aircraft will receive egress/ejection seat training from a qualified LSO. Procedures will be demonstrated using the hanging harness trainer and egress procedures trainer. EXCEPTION: For deployed units, if the unit LSO is not available, only experienced aircrew members (preferably instructor pilots) may give passenger orientation egress training provided they are trained and certified. Qualified life support specialists may conduct passenger training for ANG units. Ejection seat aircraft passengers must receive hands-on familiarization training within 72 hours prior to their flight. Should a flight be canceled and rescheduled out of the 72-hour window, hands-on familiarization training will be repeated. As a minimum, this training will include cockpit/egress familiarization, hanging harness, PLD training (if applicable), deployment of flotation equipment, use of survival components, proper adjustment and routing of the anti-G suit hose, oxygen hose, and survival kit attachment straps for each aircraft flown. When a qualified life support training instructor is not available, unit command authorities may authorize the aircraft commander to conduct passenger life support briefings. Subsequently, abbreviated briefings may also be conducted by the aircraft commander prior to each flight. Passengers in F-16 aircraft will be briefed on knee/side stick interference.
- 6.2.6.2. Passengers on multi-place aircraft (non-ejection seat) will be briefed on emergency procedures and life support equipment as depicted in appropriate aircraft passenger briefing guides. The aircraft commander or designated representative may conduct this briefing.
 - 6.2.6.2.1. Maintenance personnel who fly on a recurring basis may receive egress, hanging harness, local area survival and life support equipment training and be tracked in AFORMS with standard currencies. This will alleviate the requirement to train them prior to each flight.
- 6.2.7. Survival, Escape, Rescue, Evasion, (SERE) Training. SERE training is designed to allow aircrew members the opportunity to demonstrate their ability to operate and use assigned life support equipment under field conditions. MR aircrews will receive SERE academics within 120 days of arriving on station and field training (required for ESA and high threat aircrews) within 60 days of academic training.
 - 6.2.7.1. Frequency for SERE training listed in Table 6.1. Training is not required for personnel who have completed SV80-A within two years from date arrived station. If this training has been accomplished by another command or survival school within the specified time frame, that date should be used as the command date last (CDL) in AFORMS.
- 6.2.8. Aircrew Chemical Defense Equipment (ACDE) Training Program:
 - 6.2.8.1. ACDE Familiarization Training. Initial equipment familiarization training must be accomplished prior to first flight in the ACDE. Annual recertification will be conducted in conjunction with any scheduled chemical defense training exercise.
 - 6.2.8.2. ACDE Egress/Hanging Harness Training is accomplished IAW Table 6.1. while wearing ACDE above the shoulder equipment and ACDE gloves.
- 6.2.9. Training Aids/Training Areas.
 - 6.2.9.1. Emergency ground egress and ejection seat training will be accomplished in an EPT or aircraft simulator when available. Units may use the actual aircraft seat when EPTs are not available if seats are de-armed and made safe by qualified egress personnel. EPTs should be located in a distraction free area.

- 6.2.9.2. Aircrew members receiving life support training will wear all items of clothing and equipment normally worn during flight. Aircrew members will satisfactorily demonstrate proficiency and proper sequence of procedures to instructor personnel using the EPT. Post ejection procedures will be accomplished on the hanging harness trainer. Discussion during aircrew meetings may not be substituted for required drills.
- 6.2.9.3. The Life Support staff will perform periodic inspections of training devices. Periodic inspections will be conducted and documented to insure safety of egress procedures trainers, hanging harness devices, and water survival equipment. Personnel should ensure equipment is not left in training service for excessive amounts of time. This equipment is designed for a one time use and when used over and over in a training environment will deteriorate.
- 6.2.9.4. Training equipment will mirror equipment installed in the aircraft (simulations will be avoided where possible). Equipment used for training (other than aircrews actual equipment) will be clearly marked "FOR TRAINING USE ONLY" and securely stored.

6.2.10. Training Documentation.

- 6.2.10.1. Upon completion of training, the original attendance roster will be forwarded to the unit ground training branch for input into AFORMS. Instructors will provide written documentation to individuals who are from another unit, i.e. IG, higher headquarters staff, visiting aircrews, so their records can be updated at home station.
- 6.2.10.2. A duplicate copy of the attendance roster is kept by the unit life support section IAW AFR 4-20, Vol 2 (AFMAN 37-139).
- 6.2.10.3. Units possessing Egress Procedures Trainers (EPT) may use the AFTO Form 781, AFORM Aircrew/Mission Flight Data Document, for attendance rosters.
- 6.2.11. Decertification. Individuals requiring training are not considered delinquent until the first day of the month following the month training was due. If an aircrew member is delinquent in egress/ejection, hanging harness/personnel lowering devices (PLD) training (ESA only), or water survival refresher training, the training must be accomplished prior to the next flight. If an aircrew member is TDY, training will be accomplished upon return to home station.

6.2.12. Waivers:

- 6.2.12.1. The squadron LSO will review the records of all newly assigned aircrew members for documentation of formal survival school requirements.
- 6.2.12.2. If aircrew members arrive without having completed formal survival school requirements, a personnel processing discrepancy report will be sent by the gaining MPF to the losing MPF with an information copy sent to the losing MAJCOM/DP and HQ PACAF/DPAE.
- 6.2.12.3. Squadron LSOs will submit waiver requests through channels for HQ PACAF/DOTT review.
- 6.2.12.4. A request for waiver of formal survival training must be accompanied by a copy of the PCS orders and, when applicable, a personnel processing discrepancy report.
- 6.2.12.5. Blanket waiver requests for formal survival training will not be considered.

Table 6.1. Continuation Training Requirements.

TRAINING REQUIRED	EJECTION	NON-EJECT	HELICOPTER
EGRESS (4)	180 DAYS (1,2)	ANNUAL	ANNUAL
HANGING HARNESS	180 DAYS (1,2,4)	TRIENNIAL	BIENNIAL
HNG HARNESS W/CWDE	ANNUAL (3)	TRIENNIAL (3)	BIENNIAL (3)
LOCAL/DEPLOY SURVIVAL	INITIAL	INITIAL	INITIAL
HSERE	BIENNIAL	TRIENNIAL	BIENNIAL
WATER SURVIVAL (4)	BIENNIAL	TRIENNIAL	BIENNIAL
L. S. EQUIPMENT	ANNUAL	ANNUAL	ANNUAL
ACDE	ANNUAL	ANNUAL	ANNUAL

^{1.} Flight Surgeons 60 days. Unit commanders may waive to 180 days based on demonstrated performance.

6.3. Life Support Technical Training:

- 6.3.1. Commanders will:
 - 6.3.1.1. Ensure compliance with the provisions set forth in this regulation.
- 6.3.2. LSO/LSS/TRAINING NCOIC serve as the focal point for the wing life support/training program. Responsibilities include:
 - 6.3.2.1. Establish and supervise a wing life support training program. Ensure ALL INSTRUCTORS are initially certified (and annually thereafter) to conduct life support training. Certification will be documented on AF Form 1098 or equivilent (or letter for officers).
 - 6.3.2.2. Train the technician training instructors IAW this instruction and the Career Field Education And Training Plan (CFETP).
- 6.3.3. Training Method. Hands-on performance/certification of all critical tasks is fundamental to meeting PACAF training requirements.
- 6.3.4. Currency. Initial certification of all required tasks and annually for all equipment inspections.
- 6.3.5. General Training Requirements.
 - 6.3.5.1. LSO/LSS will forward the name, rank, SSAN, and organization of personnel requiring the Aircrew Life Support Officer Course, Aircrew Life Support Supervisor Course, or survival courses to HQ PACAF/DOTT. This letter/message acknowledges the unit will fund the individual's TDY to the port of entry (CONUS) and back. HQ PACAF will confirm selectees no later than 60 days prior to class start date.
- 6.3.6. Life Support Technician Training.
 - 6.3.6.1. Technician trainer requirements. Technician training requirements will be accomplished in accordance with AFI 36-2202 and CFETP 1T1X1. This training will include:

^{2.} Passenger's require within 72 hours of flight.

^{3.} May be included with ACDE training.

^{4.} GROUNDING ITEMS IF NOT COMPLETE BY DUE DATE

- 6.3.6.2. ALSS graduates will have several core tasks mastered and certified prior to graduation. These task are indicated in CFETP as trained at the school at the 3c level. These tasks will be recertified (task evaluations) upon completion of MAJCOM/local training requirements. Unit NCOICs will document training deficiencies and notify AETC of these deficiencies using the AF Form 1284 (Training Quality Report)
 - 6.3.6.2.1. Apprentices (3-levels) are authorized to inspect any piece of equipment which they are trained and certified IAW this directive and AFI 36-2201.
 - 6.3.6.2.2. Journeyman (5-level) training requirements. Upgrade to the 5-level will be IAW the CFETP, AFI 36-2201 and this regulation.
 - 6.3.6.2.2.1. Five-level qualification training. Each newly gained 5-level will be recertified on all tasks required in the current job prior to performing tasks unsupervised. This recertification is to validate both the journeyman's skills and knowledge along with ensuring all PACAF requirements are known and performed correctly.
 - 6.3.6.2.2.2. Five-levels requiring additional training or initial certification will use the CFETP and will follow the same training process.

Chapter 7

READINESS

7.1. General. This chapter establishes guidelines for life support personnel and equipment required to support PACAF wartime contingency/mobility/deployment commitments.

7.2. Responsibilities:

- 7.2.1. Commanders will ensure compliance with this chapter and keep life support personnel abreast of the wing's existing and forthcoming contingencies/commitments.
- 7.2.2. Wing/Squadron Life Support.
 - 7.2.2.1. Develop/review mobility and ACDE packages for unit commitments, self-sustaining operations (Based on unit tasking).
 - 7.2.2.2. Establish and implement life support programs based on OPLAN commitments/changes and ensure personnel are familiar with AFI 10-403.
 - 7.2.2.3. Ensure life support technicians are qualified to process hazardous cargo IAW AFJMN 24-204 and applicable directives.
 - 7.2.2.4. Ensure life support technicians are qualified in the use of 9mm/.38 cal./M-16 (as required).
 - 7.2.2.5. Ensure deploying life support equipment and accompanying inspection forms are sanitized. Eliminate data pertaining to organizations or units of assignment. As a minimum, life support equipment that aircrews may rely on during evasion operations (e.g. survival vests, personnel parachutes, individual survival kits, etc.) will be sanitized. Unit/base designators may be placed on PAX support survival equipment.
 - 7.2.2.6. Coordinate with appropriate wing agencies (e.g. supply, survival equipment expertise, etc.) to ensure life support requirements are sustained during deployed operations.
 - 7.2.2.7. Identify items for bare-base operations and maintenance to include aircrew CCA shelter operations, tents, portable equipment racks, shuffle boxes, etc (if required by taskings).
 - 7.2.2.8. Equipment stored in mobility bins/boxes will be inventoried and inspected for service-ability at least once every 180 days.
 - 7.2.2.9. Equipment shortages/training deficiencies that degrade unit effectiveness will be identified through the SORTS reporting process.
 - 7.2.2.10. Identify ACDE training equipment to prevent mixing serviceable and non-serviceable assets. Use the individual's AERP or CBO mask and filter pack with filters for flight and decontamination training, exercises, and during inspector general taskings.
 - 7.2.2.11. Ensure aircrews are fitted with ACDE in accordance with governing directives. ACDE bags will contain the complete basis of issue (BOI). Annotate any shortages and establish priority backorders for missing items.

- 7.2.2.12. Assemble/store ACDE in mobility bags (A-3 or suitable substitute). Store ACDE ensembles/mobility bags in an area that inhibits environmental deterioration of the CW components. Bulk store spare ACDE.
- 7.2.2.13. Train aircrews in donning, doffing, contamination control area (CCA) procedures, and emergency procedures.
- 7.2.2.14. Establish OIs or directives for issue of ACDE during mobility, exercises and deployments.
- 7.2.2.15. Ensure life support technicians are proficient in processing unit aircrew personnel through the CCA.
- 7.2.2.16. Life support personnel will be responsible for the custody and issue of aircrew weapons and ammunition only during all contingency/flying exercises.
- 7.2.2.17. Wing life support superintendents will become members of the wing's exercise evaluation team to observe life support combat capability IAW the requirements listed in this regulation. Units will be graded on these requirements during operational readiness inspections. As a minimum, equipment combat configuration, mobility, weapons issue (if applicable), deployed site operations (facilities, equipment inspection/maintenance), aircrew chemical defense equipment donning/ doffing/redonning, CCA processing, and aircrew Combat Survival, Evasion, Recovery, and Escape (SERE) should be evaluated. Additionally, provider agencies' (e.g. survival equipment, hospital, supply, etc.) ability to sustain the wing's life support program should be considered part of the observation process. Do they deploy, are they prepared to mobilize, etc.
- 7.2.3. The individual aircrew member will:
 - 7.2.3.1. Ensure ACDE is properly fitted and sized.
 - 7.2.3.2. Know the storage location and the issue procedures for ACDE.
 - 7.2.3.3. Be proficient in donning, doffing, use, CCA, and emergency procedures.
 - 7.2.3.4. Wear weapons on survival vests or web belts for weapon storage as required.
 - 7.2.3.5. Carry the number of rounds of ammunition IAW AFI 31-207.
 - 7.2.3.6. Comply with weapons restrictions cited in the Foreign Clearance Guide.

7.3. Mobility/Deployment Operations:

- 7.3.1. All aircrews will have their individual life support equipment combat configured prior to the first employment mission. Units supporting aeromedical evacuation (AE) contingencies will maintain sufficient quantities of equipment (e.g., MB-1 life preservers, oxygen masks, etc.) to support 100 percent of the unit's AE deployment responsibilities.
- 7.3.2. Mobility bins/boxes will be available for storage and transportation of life support equipment.
- 7.3.3. Mobility units will maintain sufficient quantities of technical data, tools, equipment repair parts, and supplies to support surge-type operations under bare-base conditions (if tasked) for a minimum of 60 days without resupply. Sufficient test equipment will be available to meet mobility commitments and have current calibrations.

- 7.3.4. Spare equipment (e.g., survival kits/parachutes/ LPUs) should have a minimum of 90 days serviceability prior to deployment.
- 7.3.5. Accountable life support equipment designated for deployments or directly pertaining to life support mobility must be properly coded on the unit's CA/CRL.
- 7.3.6. Portable/deployable equipment racks, workbenches, storage bins, computers, etc., will be included in the mobility package. Facility considerations will include all life support equipment requirements.
- 7.3.7. Mobility bins/boxes 180 day inventory inspection will be documented on AF Forms 2411 (Inspection Document), or equivalent, and affixed to each bin/box. Packing lists/diagrams will be completed for each bin/box.
- 7.3.8. Equipment and supplies designated for mobility commitments should be prepackaged to the maximum extent at all times. Mobility supplies should not be used as a source of assets for daily operations at home station.
- **7.4. Deployment of Inspection Records.** Establish procedures to ensure a copy of deploying aircraft and aircrew life support equipment records and AFTO Forms 46 (NES aircraft) go with the deploying life support personnel or aircraft.

7.5. Aircrew Chemical Defense:

- 7.5.1. ACDE BOI is listed in Table 7.1.
 - 7.5.1.1. Establish procedures that will ensure deploying aircrews handcarry at least one complete ACDE in or through a Chemical Threat Area (CTA). Theater commanders or HQ PACAF/DOTT may require additional ACDE to be carried into the AOR.
 - 7.5.1.2. If all of the ACDE BOI does not accompany the deploying aircrews, units will develop procedures to ship the balance of the ACDE assets to the deployed locations (mobility box, etc.). Deploying aircrews will be able to meet AOR MOPP requirements.
 - 7.5.1.3. Deployable equipment and trained technicians will be available for life support and aircrew CCA operations.
 - 7.5.1.4. Should manning requirements and mission needs dictate, augmentees may be trained in shelter operations and CCA processing. However, they will not be trained/assigned in a capacity which requires life support technical expertise such as mask fitting or mask exchanges. Aircrews on multiplace aircraft (KC-135, C-135, Etc) will deploy with one complete groundcrew ensemble each. Components of the ensemble are listed in AFI 32-4001, Table 3.1. Life Support personnel will not be responsible for the groundcrew ensemble.
- 7.5.2. Facilities/Collective Protection. Each life support section must establish and train to an ACD capability which is based on the actual facility that they will occupy. For units that do not have sufficient operational collective protection systems, open air processing is a viable option. Units will practice doffing the aircrew ensemble for open air processing IAW T.O. 14P3-1-131.
- 7.5.3. Contamination Control Area (CCA). All facilities will require a Contamination Control Area (CCA), regardless of the mechanism used to establish collective protection. If a facility is classified as hardened/semi-hardened and has filtered blowers and airlocks, the CCA will lead to the first air-

- lock. The Liquid Hazard Area (LHA) extends from the entrance to the blast door. The Vapor Hazard Area (VHA) extends from the blast door to the first airlock. If a facility employs a KMU-450 shelter modification kit, then the CCA will extend to the KMU-450 entrance. When a toxic-free environment cannot be established, the CCA will be employed to reduce or eliminate liquid contamination. The CCA permits personnel to doff/don individual protective equipment, store contaminated equipment, and perform required maintenance/decontamination of equipment.
 - 7.5.3.1. LHA. The LHA is that portion of the CCA where liquid agents are suspected or confirmed. Danger of mechanical transfer of liquids and inhalation/absorption of vapors exists in the LHA. All equipment that has been exposed to possible liquid contamination shall be doffed or stored in this area during a contamination period.
 - 7.5.3.2. VHA. The VHA is that portion of the CCA where vapors of agents are suspected or confirmed. Danger of inhalation/absorption of vapors exists in the VHA. Only eye/respiratory protection is required in this area.
 - 7.5.3.3. Equip the CCA with ancillary equipment to meet specific needs. Use of tents, storage racks, foot gratings, hand troughs, shuffle boxes, trash cans, etc., should be based on the operational requirement.
- 7.5.4. Contamination Avoidance. The avoidance of chemical contamination during and after an attack is essential. Avoidance of contamination will greatly reduce the risk of casualties during ACD operations. Personnel must make every effort to prevent liquid contamination of personnel and the interiors of aircraft/vehicles/facilities.
 - 7.5.4.1. Aircrews must receive maximum protection from liquid contamination.
 - 7.5.4.2. If transportation by covered vehicle is not available, aircrews should remain in shelters or other covered areas, if possible, until conditions permit movement in the open. If not, aircrews shall wear the plastic overcape over the aircrew ensemble while transiting open areas. Use of the overcape for an extended period of time contributes to heat stress and carbon dioxide buildup that can be detrimental to aircrew performance. Therefore, the overcape should be used only for short periods of time when other options are not available. In training environments, overcapes may have slits to allow better ventilation.
 - 7.5.4.3. The plastic overboots will not be removed until the aircrew member is ready to enter the aircraft. Consider the unique entry/exit characteristics of each type aircraft to determine the specific point for removal of the overboots. Those same characteristics may also dictate implementing additional contamination avoidance measures.
 - 7.5.4.4. Following the aircrew's final sortie of the day, the aircrew shall remain in the aircraft with the canopy closed until a covered vehicle/van is ready or the crew chief has the overcape and overboots ready for donning. Aircrews shall don their overboots prior to stepping off the ladder to the ramp. The crew chief or other ground support personnel shall, as necessary, assist with the donning of CW equipment.
- 7.5.5. ACD equipment donning/doffing and shelter processing procedures (T.O. 14P3-1-131/151).
- 7.5.6. Decontamination of equipment (T.O. 11D1-1-111).

- 7.5.7. Aircrew Mission Oriented Protective Posture (MOPP) Levels for PACAF Area of Responsibilities (AOR). Aircrew must maintain similar MOPP level standards as ground personnel when performing aircrew duties.
 - 7.5.7.1. MOPP LEVEL 0: Normal aircrew flight equipment (aircrews deploying to hostile area of responsibility will carry at least one ACD ensemble).
 - 7.5.7.2. MOPP LEVEL 1-2 (protection to and from the aircraft): Wear IACC and other flight equipment. Carry (may store once in the aircraft) a Quick ACDE kit composed of ACD overcape, overboots, gloves, and AERP. A ground mask (MCU-2/P may have microphone installed), or disposable eye/respiratory protection (DERP), when it becomes available, may also be carried (store once in the aircraft) for rapid donning in case of an attack while enroute to or from the aircraft. The MBU-13/P mask system (helmet, CBO-mask, CRU-80/P filter assembly, and hood) is not suitable for MOPP 1-2 rapid donning purposes while under attack when enroute to or from the aircraft because of the excessive time required to don the system. Units with the MBU-13/P system will require the use of the MCU-2/P for this purpose.
 - 7.5.7.2.1. If chemicals are deployed while flying in MOPP 1-2 there are three options.
 - 7.5.7.2.1.1. Divert to a non-contaminated base.
 - 7.5.7.2.1.2. Don carried eye/respiratory protection prior to landing. Don the gloves and overboots prior to opening the canopy. Don the overcape once clear of the aircraft.
 - 7.5.7.2.1.3. Stay in normal flight gear and select the regulator emergency pressure, 100% oxygen and lower visor until the aircraft is stopped (Warning: breathing oxygen with a 100 percent setting without a filter does not assure chemical/biological protection, but will minimize contamination if the pilot feels there is no other acceptable option). Immediately don carried eye/respiratory protection, gloves and overboots prior to opening the canopy. Don the overcape once clear of the aircraft.
 - 7.5.7.3. MOPP Level 3-4. Wear IACC or chemical coverall ensemble, AERP (with blower) or MBU-13/P (with CRU-80/P filter, and hood), chemical and Nomex gloves, overcape and overboots IAW 14P series TO.
 - 7.5.7.4. Aircrew MOPP procedures during exercises:
 - 7.5.7.4.1. Aircrews will simulate MOPP 1-2 by carrying/wearing the standard flight equipment and carrying a Quick ACDE kit. Quick ACDE kits should be carried with the aircrew member if possible. If the ACDE kit cannot be carried with the aircrew member, (i.e. F-16 due to limited cockpit space) as listed in 7.5.7.1. and 7.5.7.2., during exercises, procedures will be developed locally to ensure the kit is available to the crewmember prior to them departing the aircraft. Equipment will be donned prior to exiting the aircraft to simulate donning inflight. NOTE: CWU-27/P flight suit simulates the IACC/charcoal under garment.
 - 7.5.7.4.2. Aircrews will simulate MOPP 3-4 by carrying/wearing the standard flight equipment and by wearing the standard helmet and mask with the visor down. Nomex gloves will be donned. Training overcapes will be worn but removed 50 feet from the aircraft or after entering covered areas.
 - 7.5.7.5. Units will order training/support material as required to meet training requirements and avoid affecting war readiness stocks.

7.6. Life Support Manning:

- 7.6.1. HQ PACAF/DOTT is the functional manager for life support manning. Life support superintendents/NCOICs are responsible for UTC manning and unit mission contingency operations. Coordinate changes with HQ PACAF/DOTT.
- 7.6.2. As a guide, 6 per fighter squadrons and .65 times the number of all other deployable aircraft should provide adequate manning for contingency operations. One 7-level (MSgt/TSgt), or a red X certified SSgt, life support supervisor will be deployed when five or more aircraft are tasked.

7.7. Readiness Requirements:

- 7.7.1. ALSE is configured and worn for combat.
 - 7.7.1.1. Helmets are camouflaged/subdued.
 - 7.7.1.2. Vests are configured and worn by all ejection seat aircrews (ESA) and available for NESA.
 - 7.7.1.3. Exposure suits are fitted to all ESA and worn IAW the SPINS.
 - 7.7.1.4. Life preservers will be worn by all ESA and available to all other flyers.
 - 7.7.1.5. Personal lowering devices will be available and worn when required.
- 7.7.2. ALSE will be adequately protected and evacuated from damaged/destroyed or threatened facilities. Wartime reordering procedures of ALSE and supplies will be timely to prevent loss of aircrew availability for missions (i.e., master sizing chart listing pilots' names and sizes for each piece of life support equipment, standardized life support equipment reordering sheet for pilot's equipment, etc).
- 7.7.3. Aircrew Chemical Defense Equipment (ACDE) capability is adequate to meet combat requirements. This includes:
 - 7.7.3.1. Aircrews will have an ACDE bag completely stocked with a BOI as listed in Table 7.1.
 - 7.7.3.2. Units will demonstrate decontamination of aircrews (in an area most convenient for the squadron as long as the space is adequate to set up the liquid, vapor and clean (donning/gun issue) areas.
 - 7.7.3.3. LS personnel will demonstrate:
 - 7.7.3.3.1. Integration with Air Base Operability and shelter management to maximize contamination control and safety of assigned aircrews and ACDE.
 - 7.7.3.3.2. ACDE maintenance (filter change, etc.).
- 7.7.4. Aircrews are prepared to demonstrate the following:
 - 7.7.4.1. Emergency Plan of Action (EPA) and ISOPREP usage.
 - 7.7.4.2. Initial actions (first aid, concealment, camouflage, etc.).
 - 7.7.4.3. Evasion procedures.
 - 7.7.4.4. Navigation procedures.
 - 7.7.4.5. Recovery procedures (authenticate, signaling).

Table 7.1. PACAF ACDE BOI Requirements.

ITEM	OPERATIONAL	TRAINING
ENHANCED ACDE ENSEMBLES	BOI	
ENSEMBLE COMPONENTS CWU-66/P OR CWU-77/P	3	0
AERP MASK, BLOWER, HOSES*	1	0
FILTERS, C2*31H		
T-SHIRT, DRAWERS	4	1
ACDE GLOVE/INSERT SET	4	1
OVERBOOT AND OVERCAPE	4	1
BLOWER BATTERIES (SETS)	3	1
FIRST GENERATION ACDE ENSEMBLES	BOI	
ENSEMBLE COMPONENTS MBU-13 MASK AND CRU-80/P*	1	0
FILTER ASSY*	1	0
HOOD ASSEMBLY*	4	1H
FILTERS (M13)*	3	1H
CHEMICAL UNDERCOVERALL	4	0
T-SHIRT, DRAWERS40		
ACDE GLOVE/INSERT SET41		
OVERBOOT AND OVERCAPE41		
* Above the shoulder equipment		

JOHN M. McBroom, Maj Gen, USAF Director of Operations

LIFE SUPPORT TECHNICAL ORDERS

A1.1. Technical orders in the following list pertain to inspection, maintenance, storage, and use of personal flying and survival equipment. The list is for use as a reference guide only and is not all-inclusive. Specific technical orders for items authorized within the unit will be maintained by life support.

TO/TO-Series	Equipment Category
0-1-01	Numerical Index
0-1-02	General Technical Orders Index
0-1-11	Armament Equipment
0-1-12	Airborne Electronic Equipment
0-1-14	Deceleration Devices and Personal and Survival Equipment
0-1-15	Aircraft and Missile Temperature, Control, Pressurizing,
	Conditioning, Heating, Ice Eliminating, and Oxygen Equipment
0-1-31-4	Ground Radio Electronic Equipment Index
0-1-33-1	General Purpose Test Equipment
0-1-33-2	Special Purpose Test Equipment
0-1-40	Commercial Air Conditioning, Heating, Plumbing, Refrigerating,
	Ventalating, and Water Treating Equipment
0-1-43	Test Sets
00-5-1	AFTO Systems
00-5-2	Distribution and Storage of AFTO System Publications
00-5-15	Air Force TCTO System
00-20-1	Preventive Maintenance Program
00-20-5	Aircraft, Drone, Aircrew Training Devices, Engines, and Air Launched
	Missile Inspections, Flight Reports, and Supporting Maintenance Documents
00-20-9	Forecasting Replacement Requirements for Selected Calendar and Hourly Time
	Change Items
00-20-9-1	Cartridge/Propellant Actuated Devices (CAD/PAD)
00-25-241	Parachutes Logs and Records
00-35A-39	Instructions, Use and Maintenance of Medical Kits

00-35D-54 Materiel Deficiency Reporting System

00-110-series Lensatic Compass

11A-series Munitions

11P-series Cartridges for Escape Systems

12S-series Night Vision Systems 13A-series Aircraft Furnishings

14D-series Parachutes

14P-series Personal Equipment Clothing (Flying Coveralls, Helmets, etc.)

14S-series Survival Equipment, Life Preservers, Life Rafts, Strobe Lights, etc.

15X-series Oxygen Cylinders, Masks, Regulators

31R-series Survival Radios and Beacons

33-series General Purpose Test Equipment

34-series Shop Machinery and Support Equipment

43D7-series TS-24B Test Set

40W-series Manual Reverse Osmosis Demineralizer (MRODs)

LIFE SUPPORT PUBLICATIONS

A2.1. The following publications are listed for reference in establishing an effective life support program. This list is for use as a reference guide only and is not all-inclusive. LSOs, superintendents, supervisors, and technicians should possess a working knowledge of these documents and their supplements (if applicable).

PublicationTitle

Numerical Index of Standard and Recurring Air Force Publications
Numerical Index of Specialized Education/Training Publications
Numerical Index of Departmental Forms
Management Control and Authorization Program For Tables of Allowance
(TA) and Allowance Source Codes (ASC) for USAF Activities
Air Force Occupational Safety and Health (AFOSH) Standards Department of
Labor Occupational Safety and Health Standards (OSHA) and Health (NIOSH)
Publications
Index of Air Force Manpower Determinants
Life Support
Arming of Aircrew, Mobility, and Overseas Personnel
Air Base Operability
Mobilization Planning
Deployment Planning
Life Support Program
Life Support Equipment for Larger Aircraft
General Flight Rules (Chapter 6, Life Support)
Aerospace Physiological Training Program
Aircraft Egress and Escape Systems
Munitions Forecast, Allocation, and Buy Budget Processes
Preparing Hazardous Material for Military Air Shipments
War Reserve Material (WRM) Program Guidance and Procedures
Support Agreements Procedures
Arming and Use of Force by Air Force Personnel
Standard Facility Requirements

AFI 32-4001	Disaster Preparedness Planning and Operations
AFI 36-2201	Developing, Managing, and Conducting Training
AFI 36-2209	Survival and Code of Conduct Training
AFMAN 36-2236H	Guidebook for Air Force Instructors
AFI 36-2403	The Enlisted Evaluation System
AFI 36-2807	Headquarters USAF Deputy Chief of Staff Plans and Operations Annual
	Award Program
	(Annual Life Support & Survival Training Instructor Awards)
AFI 38-401	Air Force Suggestion Program
AFI 90-201	Inspector General Activities
AFI 91-202	The US Air Force Mishap Prevention Program
AFI 91-204	Investigating and Reporting US Air Force Mishaps
AFI 91-301	Air Force Occupational, and Environmental Safety, Fire Prevention, and
	Health (AFOSH) Program
AFI 91-302	Air Force Occupational and Environmental Safety, Fire Protection and Health
	(AFOSH) Standards
AFP 34-10	Code of US. Fighting Force
AFR 34-117	Air Force Aero Club Program
AFM 67-1, V2, Pt 13	Standard Base Supply Customer's Guide
AFR 64-3	Combat Search and Rescue Procedures
AFR 64-4	V1Survival Training
AFR 64-15	Survival and Emergency Uses of the Parachutes
AFR 66-12	Aircraft and Missile Equipment Accountability
AFR 125-37	The Installation and Resources Protection Program (FOUO)
AFR 127-100	Explosive Safety Standards
AFP 35-49	Air Force Leadership
AFP 64-5	Aircrew Survival
AFP 216-series	A Pocket Guide to (Applicable Overseas Country)
AFRP 35-1	Airman Magazine
AFRP 35-3	Policy Letter
AFRP 90-1	TIG Brief

AFVA 30-1	No Smoking
AFVA 32-4010	USAF Standardized Alarm Signal for the United States, Its Territories and
	Possessions
AFVA 32-4011	USAF Standardized Alarm Signal for Areas Subject to NBC Attack
AFVA 32-4012	Mission Oriented Protective Postures (MOPP)
AFVA 91-307	Air Force Occupational and Health Program
AFVA 127-3	USAF Explosive Fire Division and Chemical
PACAFI 11-301	Aircrew Life Support (ALS) Program
PACAFI 21-101	PACAF Aircraft Maintenance Organization and Procedures (CTK)
PACAFI 32-40	1Nuclear, Biological, Chemical and Conventional (NBC) Warfare Defense
PACAFP 90-3	Operations Self-Inspection Checklist
CFETP 1T0X1	AFSC 1T0X1 (121X0) Survival Training Instructor
CFETP 1T1X1 PT-2	AFSC 1T1X1 (122X0) Aircrew Life Support
TA 016	Special Clothing and Personal Weapons
TA 450	Personal/Life Support Equipment Section
TA 660	Shop Radios
JPUB 3-50-1V2	National Search and Rescue Manual, Planning Handbook
JPUB 3-50V1	National Search and Rescue Manual, National Search and Rescue System

WEAPON SYSTEM TEAM CHIEF (WSTC) ASSIGNMENTS

- -- 5 AF18 WG
- -- 7 AF51 WG
- -- 11 AF3 WG

<u>3 OSS</u>	<u>18 OSS</u>	<u>354 OSS</u>	374 0SS
C-12 F-15	E-3 UH-60 KC-135 ACDE	A/OA-10 COLD WEATHER EQUIP TRAINING	C-9 C-21 C-130 UH-1
	L S EQUIPMENT WATER SURVIVAL	NVG (4949) COMBAT EDGE	NVG (AN-AVS-6)
35 OSS	65 ALS	HSERE INSTRUCTORS	(1T0X1)
F-16	C-135	SERE SURVIVAL TRAINING	

WAR READINESS CHECKLIST: 8 0SS

PASSENGER (PAX) DEMONSTRATION EQUIPMENT

- **A4.1.** Passenger-carrying aircraft will be equipped with demonstration equipment consisting of:
 - One Adult/Child life preserver (two for C-9)
 - One POK (if applicable)
 - One LPU-6/P Infant Cot life preserver
 - Applicable PAX oxygen mask (two for C-9)
- **A4.2.** To distinguish this equipment from operational equipment, units will locally manufacture a red storage container to accommodate this demonstration equipment.
- **A4.3.** The demonstration Adult/Child and LPU-6/P life preservers will have a twelve-inch yellow streamer attached to the carrying case.
- **A4.4.** The demonstration POK will have a yellow carrying bag.
- **A4.5.** All demonstration equipment will be stenciled "For Demonstration Only" in one-half inch black lettering.

SRU-21/P SURVIVAL VEST

Noun	Quantity
*Survival Radio PRC-90/112-series (w/spare battery)	1 each
*Kit, First Aid (Soft Pack) (2)	1 each
*Signal, Distress, MK-13/MK-124	2 each
*Signal Kit, Personnel Distress, A/P25S-5A	1 each
*Compass, Lensatic/Magnetic (Silver Ranger - PJ)	1 each
*Light, Marker, Distress, SDU-5/E (w/IR Filter and Flashguard)(1)	1 each
*Mirror, Signal, Type I or II	1 each
*Water, Flexible Package	2 each
Box, Matches, Waterproof, w/matches	1 each
Ointment, Sunburn, Preventative	1 each
Repellent, Insect	1 each
Whistle, Police, Plastic	1 each
Knife, Pocket or leathermans tool	1 each
Camouflage stick/equivalent	1 each
Tourniquet	1 each
** Holster	1 each
*** HEEDS, Bottle	1 each
**** Packet, Sea Dye Marker	1 each

* MANDATORY

- ** Required for ejection seat aircrew members
- *** Required for helicopter aircrew members to include Pararescue personnel
- **** Required for Pararescue personnel
- (1) may be installed on harness
- (2) may be installed in survival kit in ejection seat aircraftH

PJ Load Bearing Equipment Vest (Nylon)/SARVIP

The pararescue men (PJ), as an extension of the rescue aircraft, regularly deploy from the aircraft and are authorized to wear the SRU-21/P survival vest or the PJ Load Bearing Equipment (LBE) Vest as required for mission execution. The following minimum survival equipment must be included in the LBE in order for the PJ to use the LBE in place of the SRU-21/P vest for flying on a daily basis.

<u>ITEM</u>	QUANTITY
Survival radio PRC-90/112 series (w/spare battery)	1 each
Individual First Aid Kit	1 each
Signal, Distress MK-13/MK-24	2 each
Mirror, Signal Type I or II	1 each
Signal, Kit, Personnel Distress, A/P25S-5A	1 each
Light, Marker, Distress, SDU-5/E (w/flashguard and IR Filter)	1 each
Whistle Plastic	1 each
Compass, Lensatic or Silver Ranger	1 each
Knife, Sheath General Purpose	1 each
Knife, Pocket or Leatherman Tool	1 each
HEEDs, Bottle (as required for mission)	1 each
Box, Matches, Waterproof w/matches	1 each
Packet, Sea Dye Marker (as required for mission)	1 each

Note 1. Components do not require securing.

Note 2. Pararescue personnel are not required to wear fire-retardant clothing when special purpose clothing is considered more appropriate for mission completion (Authority: HQ USAF/XOO letter, 17 Jul 1978, Waivers to AFR 60-16).

ML-4 SURVIVAL KIT COMPONENTS

Noun	Quantity
*Repair Kit, Life raft w/Pliers	2 each
*Life raft LRU-21/P (LRU-16/P as alternate)	1 each
*Water, Flexible Package	4 each
Blanket, Combat Casualty (NSN 7210-00-935-6665)	1 each
Mittens, set, type N4B	1 pair
Bag, Water Storage, 3 pt.	1 each
*Hood, Winter, Wool	1 each
Hat, Camouflage (Large or X-L)	1 each
AFP 64-5	1 each
*Socks, Wool (size 12)	1 pair
Packet, Sea Marker Dye	1 each
*Demineralizer, reverse osmosis, -06	1 each

 $[\]ast$ MANDATORY. Secure mandatory components to the survival kit container in accordance with TO 14S1-3-51, Section II.

LIVE-ABOARD-KIT (LAK) COMPONENTS

<u>Noun</u>	<u>Quantity</u>
Bag, Sleeping #	6 each
Repellent, Insect	6 each
Ointment, Sunburn, Preventative	6 each
Hat, Sun (Large or X-Large)	6 each

^{# -} The preferred sleeping bag is the Extreme Cold (NSN 8465-01-033-8057). Life support units may substitute the outer (Arctic) or inner (Mountain) bags for the Extreme Cold bags. MC-1 type sleeping bags will not be used for LAKs.

MANDATORY INDIVIDUAL KIT COMPONENTS

OTY

MANDATORY COMPONENTS

1 each Life Raft, One Man (LRU-22/P) (LRU-16/P as alternate)

1 each (Note 2) Radio, PRC-90 or equivalent

2 each Life Raft Repair Plug

2 each (Note 1) Signal, Distress, MK-13 or MK-124 MOD-O

1 each Packet, Sea Marker

1 each Whistle, Police, Plastic

1 each Match Container, with Matches
4 each Flexipac Water or equivalent

1 each (Note 2) *Tropical First Aid Kit (Soft Pack)

1 each (Note 3) Space Blanket

1 each Beacon (AN/URT series)

1 each (Note 2)Signal Mirror, 2" X 3"
1 each (Note 2) Compass, Lensatic or Equivalent
1 each (Note 2) Signal Kit, Distress, A/P 25S-5A

1 pair Divers Gloves (not required if unit commander directs issue with

anti exposure suit wear).

1 each AFP 64-5

1 each1 each2 Bag, storage, Drinking, 3 Pint3 Pint4 Hood, Cold Weather, Wool

NOTE 1: Wings that mandate aircrews wear the survival vest on a daily basis may carry one flare in the vest and one flare in the kit. Up to four flares are authorized as a unit option. No item in a mandated vest needs to be duplicated in a survival kit.

NOTE 2: Wings that mandate aircrews wear the survival vest on a daily basis may carry these components in the vest.

NOTE 3: Optional for survival kits equipped with sleeping bags.

Attachment 9
PROTECTIVE CLOTHING KIT (PCK)

Noun	NSN	Quantity
Apron, Clear Vinyl	8415-00-715-0450	2 each
Gloves, Rubber	8415-00-266-8675	2 pair
Gloves, Arimid	8415-00-092-3910	1 pair
Shears, Metal Cutting	5110-00-092-3910	1 each
Vermiculite	5640-00-801-4176	5 pounds
Bags, Plastic	8105-00-848-9631	3 each
Tape, Masking, 1"	7510-00-266-6712	1 roll
Dustpan, Rubber	7290-00-616-0109	1 each
Broom, Whisk, 10"	7920-00-240-6350	1 each
*Goggles, MIL-G-6354 each		

 $[\]ast$ MIL-G-635 Goggles required for C-130 only as specified in Atch 5.1. Pack goggles in the Protective Clothing Kit.

MINIMUM SURVIVAL KIT COMPONENTS C9, C-12, C-21, UH-1

Noun	Quantity
*G ' ID I' DDC 00 ' (/ I w)	1 1
*Survival Radio, PRC-90-series (w/spare battery)	1 each
*Kit, First Aid	1 each
*Compass, Lensatic/Magnetic1 each	
*Light, Marker, Distress, SDU-5/E (w/o IR Filter or Flashguard)	1 each
*Signal, Distress, MK-13/MK-124	3 each
*Kit Signal, Personnel Distress, A/P25S-5A	1 each
Whistle, Police, Plastic	1 each
Mirror, Signal, Type I or II	1 each
Water, Flexible Package	8 each
Bag, Water Storage, 5 qt.	2 each
AFP 64-5	1 each
Knife, Pocket	1 each
Box, Matches, Waterproof, w/matches	2 each
* MANDATORY	
C-135 Aircraft Configuration	
(65 ALS)	
Life Preservers, A/C	40 ea
Life Preservers, LPU-6/P	2 ea
Life Raft, 46 Man	1 ea
Radio, PRC-90- Series	2 ea
Oxygen Mask, 358-Series	2 ea 7 ea
Oxygen Mask, AWACS	2 ea
Oxygen Mask, POK	5 ea
Oxygen Mask, PMK	32 ea
Oxygen Mask, Smoke	8 ea
Oxygen Mask, EEBD	2 ea

TECHNICAL ORDER OPTIONS

TECHNICAL ORDER OF HONS			
<u>TO</u>	<u>Paragraph</u>	<u>Item Position</u>	
00-5-2	4-15 c	Annotating supplements in TOs.	Mandatory
	4-16d	Annotating TOPS on paragraphs or sentences	Unit Option
	4-27	AFTO Form 110, Technical Order/CPIN	
		Distribution Record.	Unit Option
	4-27d	Use of a separate AFTO Form 110 for each TCTO.	Unit Option
00-20-9	1-4a, NOTE	AFTO Form 223, Time Change Requirements Forecast	Mandatory
	3-1	Forwarding AFTO Form 223	Mandatory
00-25-241	Para 1 NOTE	Unit information on AFTO Forms omitted	.Mandatory
	4b&c	AFTO Form 392, Files and Entries.	Unit Option
14-1-4	2-6, NOTE 2	Use of local control numbers.	Mandatory
	4-2b, NOTE	Substitute local control numbers for names and SSN.	Mandatory
14D1-2-1	3-4e.2(h)	Routing of chest strap through V-ring.	Unit Option
	3-50,C, NOTE	Waiver for 6 foot height restriction on PLD Training.	Mandatory
14D3-11-1	3-10a	Unit information on AFTO Forms omitted.	Mandatory
	4-2	Waiver of preflight inspection.	Unit Option
	4-6 C NOTE	Parachute minor repair.	Unit Option
	4-71 NOTE	Use of slotted head screw.	Unit Option
	5-10a, NOTE	Removal of Zero Delay Lanyard. 1&2	Mandatory
	5-10h, NOTE	Installation of nylon webbing and snaps for	
		stowing zero delay.	Mandatory
	5-14m	Installation of reinforcement webbing for use with PLD.	Unit Option
	5-14q	Installation of protective sleeves on the torso harness	Unit Option
		adj. straps.	

	5 1 C	I (II) CODILECTION 1	II '. O .'
	5-16c	Installation of SDU-5/E Light on torso harness.	Unit Option
	5-16f	Installation of SRU-16/P Minimum Survival kit.	Mandatory
	5-16G(12)	Direct Beacon plug-to-riser NOTE hookup.	Unit Option
	5-17b	Installation of Teflon tape on PLD braking device.	Mandatory
	5-17d	Securing snap hook and brake Assy on PLD.	Mandatory
		(USAFR, unit option)	
	11-8j	Installation of PLD, PCU-10/P on parachutes.	Mandatory
		(USAFR, unit option)	
	11-8j (7)(a)	Tacking of zipper. (Page 11-18)	Unit Option
	11-81	Installation of Teflon tape on PLD breaking devices.	Mandatory
	11-8m	Installation of AN/URT-33 beacon. (Page 11-18)	Mandatory
	11-8o	Installation of hook blade knife. (Page 11-20)	Mandatory
	18-6c(11)	Attachment of comfort pad (leg strap). (Page 18-8)	Unit Option
	18-6c(11)(a)	Comfort pads for SEAWARS. (Page 18-8)	Unit Option
	18-9b	Installation of PLD PCU-10/P on harness. (Page 18-14)	Unit Option
	18-9e, NOTE	Installation of minimum survival kit. (Page 18-26)	Unit Option
	18-9f, NOTE	Installation of SDU-5/E survival light. (Page 18-26)	Unit Option
	18-9j, NOTE	Installation of back pad P/N 60D6033. (Page 18-26)	Unit Option
	18-91	Installation of lumbar support pad, MXU-22/P. (Page 18	-26)Unit
Option			
	18-9n, NOTE	Installation of AN/URT-33 series (Page 18-27)	No beacon
14P3-1-112	2-4, NOTE	Location of MC-1(or riser cutter)knife on outer garment	.Mandatory
	2-14b	Rework of Jacket Hood.	Unit Option
14P3-1-131	1-2A(13)	Use of skull cap.	Unit Option
	Figure 1-5	Attachment of connector cap to lower D ring	Mandatory
	3-1B(1)	Mask headstrap rework.	Mandatory
	3-1B(2)	Mask rivet hot-spot rework.	Mandatory
	3-1b(2)(d)	Extension of mask head strap. NOTE (Page 3-4)	Unit Option
	3-1b(2)(f)	Use of 2x3 inch piece of moleskin under mask tab.	Unit Option
	(Page 3-4)		
	3-1b(2)(h)	Hand stitching of mask head strap. (Page 3-4)	Unit Option

	3-1b(2)(k)	Mask head strap loop rework (Page 3-4)	Unit Option
	3-1b(7)	Skull cap fitting. (Page 3-9)	Unit Option
	H3-1b(3)	3" pull tab on helmet chin strap	Unit Option
	3-1b(11)	Tacking of retention strap assembly. (Page 3-17)	Mandatory
	3-1d	CRU-80/P thumb tab rework.	Mandatory
	3-1g	F-16 Filter assembly rework.	Mandatory
	3-1i	Under coverall zipper pull tab.	Unit Option
	3-2b	(3) Filter pack disassembly. No	
	3-3a(2),	Use of depth gauge or equivalent. (Page 3-2)	Unit Option
	NOTE		
	4-2c, NOTE	Spot taping. (Page 4-5)	Mandatory
	4-2c(13)	Removal of underarm straps. (Except F-111)Warning 2r	nd Mandatory
	NOTE		
	4-2c(13)(c) NOT	ΓΕ:Hook & pile closure for Training. (Page 4-10)	Unit Option
	5-8a(6)	Silicone repair of strap tab.	Unit Option
	Fig 6-4	Mini-amplifier/speaker for ACDE training. (Page 6-9)	Mandatory
14P3-1-151	3RD	Removal of dust cover (Page VI)	Mandatory
	WARNING		
	2ND NOTE	Use of tie straps in lieu of clamps (Page VII)	Mandatory
	4-18, 2nd item,	Spot Taping first NOTE (Page 4-9)	Unit Option
	5-42c	Manifold Assembly Thumb Tab Rework with parachute	s Mandatory
		(Page 5-15)	
14P3-4-151	1-10b(1)	Lens scratch prevention	Unit Option
	Table 2-2	DMH-1 Comm Tester Unit Option	1
	4-5b(1)	Moleskin to helmet under visor (Page 4-2)	Unit Option
	4-5.f	Tacking visor adjustment buckle. (Page 4-2)	Unit Option
	5-3	Responsibility of performing preflight(aircrew) and post	•
		(life support) inspections. (Page 5-1)	Mandatory
	5-4c NOTE	Documentation	Unit Option
	5-11 NOTE	Routing of comm cord for F-16	Unit Option
		-	*

	5-11A	Fabrication of Customized Earcup Cushion	Unit Option
	5-15.1.1	Attachment of bayonet receivers W/O crewmember (Page 5-8)	Unit Option
	5-18g	Visor lens scratch remover. (Page 5-8C)	Unit Option
	5-19d(4)(c)	Tape installation on visor housing. (Page 5-10C)	Mandatory
	5-25c NOTE	Chin strap pull tab Unit Option	
	5-26	Preflight of Helmets (User)	Mandatory
	5-27	Post-flights of helmets (Life Support)	Mandatory
	5-28j	Local manufacture of visor strap	Unit Option
	5-28j	Inspection of visor strap Mandatory	
	5-33a(4)	Painting or refinishing receivers	Unit Option
	5-34a(6) NOTE	Moleskin above bayonets	Unit Option
14P3-5-91	1-14 NOTE	Determination of essential clothing/equip	Mandatory
	1-16	Use of water test devise	Unit option
14P3-6-51	2-6 NOTE	Use of MC-1 knife. (Page 2-1)	Mandatory
	6-1 NOTE	Laundry of suit by life support. (Page 6-1)	Mandatory
	6-17	Replacement of check valves. (Page 6-3)	Unit Option
14P3-6-121	2-6	Hook blade knife in F-111 aircraft.	Not Required
	2-6 NOTE	Wear of MC-1 hook blade knife in ejection	
		seat aircraft. (riser cutter may be substituted)	Mandatory
	3-4a NOTE	Check and reaccomplish fit; 90 days. (Page 3-1)	Mandatory
	6-1 NOTE	Garment cleaning Unit Option	
tory	6-8	Replacement of weaken or frayed lacing(color, O D G	reen).Manda-
•		(Page 6-2A)	
	6-12b	Elastic band chart holder. (Page 6-2B)	Unit Option
	6-14	Installation of 5 inch knife. (Page 6-6)	No
14P3-9-12	4-4	180 Day periodic inspection.	Mandatory
	5-15	Attachment of snap fasteners to helmet. (Page 5-2)	Mandatory

14P3-9-21	4-4	Alternate quick check of aircraft PLZT power system (Page 4-2)	Mandatory	
	5-2, NOTE	2Altering AFTO Form 334. (Page 5-1)	Mandatory	
	5-2a, NOTE	Waiver of preflight inspection if seal is intact. (Page 5-1) Unit Option	
	5-9, C-6	Use of black stencil ink. (Page 5-29)	Mandatory	
	5-9e(11)	Toplatch mounting using pressure sensitive tape. Unit O _I	ption	
		(Page 5-32)		
14P3-9-31	5-1, NOT	EInspection waiver. (Page 5-1)	No	
14S-1-102	1-1a and	Use of polyethylene bags for items prone to spillage/	Mandatory	
		melting		
	1-7c NOTE	Additional info on applicable cards.Mandatory		
	5-1, NOTE	Delete, obliterate or omit data. Mandatory		
	5-1.1.2, NOTE	Elimination of preflight inspecting of prepositioned life	Unit Option	
		preservers. (Page 5-1)		
	5-1.1.3, Note	Functional test during initial inspection.	Mandatory	
	5-5.6, NOTE	Delete, obliterate or omit data.	Mandatory	
	5-8.5, NOTE	Delete, obliterate or omit data.	Mandatory	
	5-10a, NOTE	250-day inspection cycle prepositioned rafts.	Unit Option	
	5-11.5	Delete, obliterate or omit data.	Mandatory	
	5-14.6	Delete, obliterate or omit data.	Mandatory	
	5-16.1, NOTE	Use of interlocking seal bags. (Page 5-52)	Mandatory	
	5-161r(4), NOTE Wrapping of plug on water activated light. (Page 5-55) Mandatory			
	5-18a, NOTE	200 day inspection of LPUs on aircraft. (Pg 5-57)	Unit Option	
		Table 7-1, Blanket, spare battery.	Mandatory	
	NOTE 4 & 11			
	NOTE 11	Meclizine Hydrochloride.	No	
	Table 7-2,	Blanket, spare battery.	Mandatory	
	NOTES 4 & 11			
	Table 7-3	Use of zip lock bag for raft repair kit. (Page 7-25)	Mandatory	

	NOTE 4	Spare battery.	Mandatory
	NOTE 7	Use of SDU-5/E.	Unit Option
	NOTE 8	Use of desalter kit.	Unit Option
	NOTE 11	Installation of meclizine hydrochloride. (Page 7-25)	No
		Table 7-4,	
	NOTE 2	Use of zip lock bag for raft repair kit. (Page 7-31)	Mandatory
	NOTE 4	Installation of PRC-90 spare battery F-2B accessory kit.	Mandatory
	NOTE 7	Replace distillation kit with desalter kit or	
		water. (MULTIPLACE RAFTS ONLY)	Unit Option
	NOTE 10	SDU-5/E vice SDU-30/E.	Unit Option
	NOTE 13	Aluminized Blanket. (Page 7-31)	Mandatory
	NOTE 13	Survival Straw/Meclizine Hydrochloride.	No
	NOTE 13	Light sticks.	Unit Option
14S1-3-51	1-4	Selection of optional components.	Unit Option
	1-6, NOTE	Org, unit, activity obliteration.	Mandatory
	2, NOTE	Pull tab on plastic bag.	Unit Option
	2-9, NOTE	Decal for sleeping bag on container.	Unit Option
	2-13a, NOTE	Match/flintplastic zip lock bag.	Unit Option
	2-20	Personnel Distress Kit. (A/P25S-5A).	Mandatory
	2-24	Tying of components into container. See para 5-5a	Mandatory
	2-28i(2)	Use of zip lock bags. (mirror) Unit Option	
	2-28x, NOTE	Use of zip lock bags. (items that spill or melt).	Mandatory
	4-43	Use of ML-3 survival kit as a supplement kit. (Page 4-25	5)No
	4-56f, NOTE	Use of actuator plug (ACES II kit). (Page 4-40)	No
	6-7	Inspection of SRU-16/P minimum survival kit. (Pg 6-1)	Unit Option
	6-8	Option 1 SRU-16/P minimum survival kit inspection.	
		Use of Option 1 or 2	Mandatory
	6-9	Option 2 SRU-16/P minimum survival kit inspection	
		Use of Option 1 or 2.	Mandatory
	7-10, NOTE	Use of folding type opener on food packets. (Page 7-1)	Mandatory
	Table 8-1	Install ammunition/tracer in vest.	Unit Option

	8-6, NOTE	1Pocket positioning for vest.	Unit Option
	8-6, NOTE	2Pocket flap pull tab.	Unit Option
	8-19d	Vest zipper mod for ejection seats.	Mandatory
	8-19g	Cross-piece modification	User Option
	8-19h	Reinforced eyelet's.	Unit Option
	8-19i	Vest zipper pull tab snap.	Unit Option
	8-19j	Installation of zipper snap fastener. (Page 8-5)	Unit Option
	8-23	Installation of 5 inch knife. (Page 8-5)	Unit Option
	8-25	Installation of SRU-16/P on vest in lieu of on the	Unit Option
		parachute	
	8-29	Modification of vest holster to accommodate 9mm	Mandatory
		pistol	
	Table 11-1,	Substituting canned water for desalter kit	Unit Option
	NOTE 5,		
	Table 11-1	Installation of survival beacon.	Mandatory
	Table 11-1,	Installation of optional items.	No
	NOTE 4,		
	11-2	Items to be installed in survival kits. (Page 11-1)	Mandatory
	11-2.c.,	NoteUse of zip lock bags.	Mandatory
14S1-9-1	5-25G(20),	Installation of handle guard with low profile	Not Required
		handle.	
	NOTE		
14S10-2-2	5c	Use of TS-23A tester. (Page 3)	Mandatory
15X5-3-6-1	2-4A, 2d, Note	Use of 1-inch wide double faced tape on custom	Unit Option
		nose pad.	
	3-3.7	Dust cover	Unit Option
	4-7.1, NOTE	Securing mask strap with tape. (non-ejection seat aircraft).	Unit Option
	4-7.4., NOTE	Folding/Tacking mask straps for temporary Use.	Mandatory
		(Ejection seat aircraft)	-
	4-7.4f	Trimming of faceform. (Page 4-6)	Unit Option
			*

	4-10, CAUTION	N Use of dust cover on MBU-12/P mask in storage.	Unit Option
		(Page 4-6A)	
	4-13	Postflight inspection. (MBU-12/P). (Page 4-6A)	Mandatory
	5-6	Frequency of disassembly for cleaning	
		MBU-12/P mask. When mask has not been	
		worn within previous 30 days (60 days).	Mandatory
	5-13.2, NOTE	Removal of microphone bracket.	Unit Option
	5-19.5a.	Strap fastener in lieu of hose clamp.	Mandatory
	5-19.5b	Use of strap fastener installation tool. (Page 5-9)	Mandatory
	5-19, 9a	Torquing of MBU-12/P valve. (Page 5-10)	Mandatory
15X5-4-1-101	3	Recording of CRU inspection. (on next higher assembly)	Mandatory
	3b, NOTE	Use of MQ-1 and MH-2. (Page 4A)	Unit Option
15X5-4-4-12	4-4d(5),		
	NOTE 2	Temporary tacking of mask.	Mandatory
	4-4d(5),	Alternate procedure for securing MBU-5/P mask straps.	
	NOTE 3	(Page 4-2)	Unit Option
	5-1, NOTE	Touch up bayonet receivers.	Unit Option
	5-2	Frequency of MBU-5/P masks disassembly.	Mandatory
		when mask is prepositioned (90 days). (Page 5-1)	
	5-5e	Use of strap fasteners on MBU-5/P masks. (Page 5-2)	Mandatory
	5-11a, NOTE	Postflight. (Life Support)	Mandatory
	Fig 1-2	Retention strap buckle location.	Unit Option
	C	•	•
15X5-4-4-13	3-2e	Use of strap fastener. (Page 3-2)	Mandatory
15X5-4-5-3	7a(3)	Use of strap fastener. (Page 3)	Unit Option
			_
15X5-4-8-1	6-2	Personnel designated to inspect and repair MBU-10/P	Mandatory
		mask	-
	6-2	Complete disassembly and cleaning of masks will not	Mandatory

	6-4I	Use of strap fasteners. (Page 6-1)	Unit Option
15X5-4-10-1	3-1e	Storage of Anti-Smoke goggles P/N 322-70 on smoke mask.	Mandatory
	4-2.a.8	Quick-Don Mask, P/N 358-1506V vent valve	Mandatory
		in the closed position when Anti-Smoke Goggles are NOT in use. (Page 4-2)	
	5-2.d	Complete disassembly and cleaning of mask	Mandatory
		will not exceed 90 days.	
15X5-5-3-1	5-5b(6), NOTE	Recording of periodic inspections on AFTO Form 334,	Mandatory
		Form 1574 and pressure sensitive tape. (Page 5-2)	
	5-8.o	Use of strap fasteners on smoke/quick start mask.	Unit Option
	5-2d	Complete disassembly and cleaning of masks will not	Mandatory
		Exceed 120 days.	
	5-5.3.3	Use of strap fastener. (Page 5-6)	Unit Option
	5-8.2 6	Tacking of top strap assembly quick-don mask	Mandatory
		358-1506V.	
15X11-19-2	1-58 3rd		
101111 1/ 2	NOTE	PLB in Survival kit (N/A for aircraft with back style	Mandatory
		parachutes).	J

NOTE: Applicable MAJCOM options not listed above will be forwarded to HQ PACAF/DOTT for consideration.

MULTIPLACE LIFE RAFT CONFIGURATION (T-9, LRU-1/P, LRU-14A/A)

Radio, PRC-90-series (w/spare battery)		
Smoke, Illumination Flare (MK-13/MK-124)		
A/P 25S-5A Flares	1 ea	
Water Bag, 5 qt	2 ea	
Marker Distress Light	1 ea	
Whistle	1 ea	
Signal Mirror	1 ea	
First Aid Kit	3 ea	
Water, Flex Pack	19 ea	
or canned	8 ea	
Match container w/matches	1 ea	
AFP	1 ea	
Sea Dye Marker	5 ea	
Compass		
Raft Knife	1 ea	
Raft Repair Kit	4 ea	
Hand Pump	1 ea	
Pump Adapter	1 ea	
Bailing Sponge	2 ea	
Bailing Bucket	1 ea	
Chapstick	7 ea	
Sunburn Creme	7 ea	
Fishing Kit	1 ea	
Sectional Oars	2 ea	
Canopy/Paulin	1 ea	
50 ft Length Nylon Cord		
Desalter Kit		
or Demineralizer, reverse osmosis		

- * Flash guard and I/R filter will not be used in these kits.
- **A mixed combination of water containers may be used for 80 total fluid ounces of water per raft.

TRAINING OUTLINE - EJECTION SYSTEMS

- **A13.1. Objectives.** To provide realistic hands-on training, situational awareness and Dash-1 refresher training on the normal and emergency operations and procedures of the ejection system. Each aircrew member must satisfactorily demonstrate proficiency and explain the proper procedures to the unit LSO or life support personnel. This lesson plan outline covers normal and emergency operating procedures and situation awareness.
- **A13.2. References:** A13.2.1.Applicable aircraft Dash 1.
- A13.2.2.Applicable aircraft ejection system TOs.
- A13.2.3.TOs 14D1-2, -1, 14P3-1-131, and 14P3-1-151.
- **A13.3.** Training Aids: A13.3.1. Visual Aid No. 52453DF (Ejection Decision, A Second Too Late) (initial only).
- A13.3.2. Ejection seat training device.
- A13.3.3.Life support equipment (including ACDE) used with system.
- **A13.4.** Specific Areas to be Covered: A13.4.1.Introduction to the ejection system.
- A13.4.2.Ejection seat particulars and life support equipment (including ACDE), used/integrated with system.
- A13.4.2.1.Operation.
- A13.4.2.2.Preflight.
- A13.4.2.3.Entry.
- A13.4.2.4.Ejection system emergency operations (including ACDE):
- A13.4.2.4.1.Pre-egress procedures/actions.
- A13.4.2.4.2.Body position for ejection.
- A13.4.2.4.3.Malfunctions/corrective actions.
- A13.4.2.4.4.Canopy jettison.
- A13.4.2.4.5. High altitude ejection.
- A13.4.2.4.6.Low altitude ejection.
- A13.4.2.4.7. Capability/limitations.
- A13.4.2.4.8.Ditching (to include recommendations if aircraft sinks prior to crew evacuation, and whether or not underwater ejection should be attempted).
- A13.4.2.4.9. Normal seat separation and parachute deployment after ejection.
- A13.4.2.4.10. Manual seat separation and parachute deployment.
- A13.4.2.4.11. Emergency ground egress.

A13.4.2.4.12.Emergency oxygen supply/use.

A13.4.2.5.Situation awareness:

A13.4.2.5.1.Dive angle.

A13.4.2.5.2.Bank angle.

A13.4.2.5.3.Sink rate.

A13.4.2.5.4.Angle of attack.

A13.4.2.5.5.Cockpit stresses.

A13.4.2.5.6.G-forces.

A13.4.2.5.7.Altitude (AGL).

A13.4.2.5.8.Rear seater knee/G-suit interference on F-16 aircraft

A13.4.2.5.9.Proper method for urination in ejection seats and hazards of unstraping and raising seat in an F-16 aircraft.

TRAINING OUTLINE - NON-EJECTION SYSTEMS

- **A14.1. Objective.** To provide realistic hands-on training on egress procedures for aircraft not equipped with ejection systems. Each aircrew member must satisfactorily demonstrate qualifications and explain the proper procedures. This lesson plan outline covers equipment available, aircraft egress (including parachute deployment), ground egress, and ditching.
- **A14.2. References:** A14.2.1.TOs 14D1-2-1, 14S-1-1-2, 14S-3-51, 14S3-1-3.
- A14.2.2.Parachute assembly TOs.
- A14.2.3. Applicable aircraft Dash 1.
- A14.2.4.Training Aids:
- A14.2.4.1.Aircraft.
- A14.2.4.2.Parachute (if applicable).
- A14.2.4.3.Helmet/oxygen mask (if applicable).
- A14.2.4.4.Survival kit/survival vest (if applicable).
- A14.2.4.5.Flotation equipment.
- **A14.3.** Specific Areas to be Covered: A14.3.1. Parachute assemblies used.
- A14.3.2.Location, preflight, and donning of equipment in aircraft.
- A14.3.3.Crew coordination order of bailout, individual aircrew's responsibility.
- A14.3.4.Air Egress procedures:
- A14.3.4.1.Aircraft exit.
- A14.3.4.2.Body position before and after aircraft exit.
- A14.3.4.3.Parachute actuation high/low altitude.
- A14.3.5.Ground egress procedures.
- A14.3.5.1.Egressing in smoke and fumes
- A14.3.6.Ditching procedures.
- A14.3.6.1. Crash worthy seats in aircraft

TRAINING OUTLINE - HANGING HARNESS/POST-EGRESS PROCEDURES

- **A15.1. Objectives.** To provide realistic hands-on refresher training for post egress procedures. Each aircrew member must satisfactorily demonstrate proficiency and explain the proper procedures to unit LSO or life support personnel. This lesson plan outline covers parachuting procedures from parachute canopy deployment to landing, including use of the personnel lowering device (PLD).
- **A15.2.** References: A15.2.1.TO 14D1-2-1.
- A15.2.2.Applicable parachute/harness assembly technical order.
- **A15.3. Training Aids:** A15.3.1.Parachute/harness assembly (including all components).
- A15.3.2. Hanging harness trainer.
- A15.3.3.All personal/survival equipment worn during flight, to include the survival kit and PLD.
- A15.3.4. Visual Aid No. 52561DF, CW Post Bail-out and Ejection Procedures (NOTE: initial training only).
- A15.3.4.1. Specific type of parachute/harness used by the aircrew.
- A15.3.4.2. Automatic release.
- A15.3.4.3.Parachute release.
- A15.3.4.4.Parachute canopy.
- A15.3.4.5. Parachute pack with locator beacon (if applicable).
- A15.3.4.6.Seat trainer for aircraft with aircraft installed parachutes (if applicable).
- A15.3.4.7.Personnel lowering devices.

A15.4. Specific Areas to be Covered:

- A15.4.1.Particulars on parachute canopy and harness assembly.
- A15.4.2.Body position for canopy deployment.
- A15.4.3.Canopy malfunctions and corrective procedures.
- A15.4.4.Four-line release.
- A15.4.5.Descent procedures (including ACDE).
- A15.4.6.Parachute canopy control:
- A15.4.6.1. Water landings.
- A15.4.6.2.Open terrain landings.
- A15.4.6.3. High wind landings (parachutes having cross-connectors straps).
- A15.4.6.4.Tree landings.
- A15.4.6.5. Night landings.

- A15.4.7.Survival Kit Deployment.
- A15.4.7.1.Automatic and manual.
- A15.4.7.2.Jettisoning.
- A15.4.8.Beacon.
- A15.4.9.Use of PLD.
- A15.4.9.1.Hook-up.
- A15.4.9.2.Operation.
- A15.4.9.3. Capabilities/Limitations
- A15.4.10.Understands parachute opening and deployment devices.
- A15.4.10.1.Can fit and adjust the torso harness or parachute.
- A15.4.10.2.Can perform a preflight inspection of the torso harness, parachute and components.
- A15.4.10.3.Can attach the torso harness to the aircraft-installed parachute.

TRAINING OUTLINE - LIFE SUPPORT EQUIPMENT AND RESCUE PROCEDURES

A16.1. Objectives. To provide realistic hands-on training on signaling devices and refresher training on rescue procedures. Each aircrew member must satisfactorily demonstrate and explain the use/limitations and capabilities of each signaling and rescue item to the unit LSO or life support personnel. To provide realistic hands-on training on preflighting, fitting and refresher training on the operation of the survival vest and kit. Each aircrew member must satisfactorily demonstrate qualification and explain the operational features and use of all components to the unit LSO or life support personnel. To ensure each aircrew demonstrate a knowledge of the various items of aircrew clothing and their use, the protection provided by the various items of aircrew clothing, the importance of proper care and fit of aircrew clothing, and the services provided by life support relating to fit, inspection, and repair of aircrew clothing.

A16.2. Reference:

- A16.2.1. TOs 14S-1-102, 14S1-3-51, 11A10-26-7, 14S10-2-2 and applicable 31R series.
- A16.2.2. JPub 3-50-1V2, JPUB 3-50V1 (Formerly AFMs 64-2), AFM 64-5.

A16.3. Training Aids:

- A16.3.1. PRC-90/PRC-112 training radio with accessories.
- A16.3.2. URT-33 beacon.
- A16.3.3. Signal, smoke and illumination, MK-13/MK-124 Mod 0
- A16.3.4. A/P25S-series signal kit.
- A16.3.5. Mirror.
- A16.3.6. SDU-5/E strobe light with filter/flashguard.
- A16.3.7. Sea marker dye.
- A16.3.8. Whistle.
- A16.3.9. Rescue aircraft (when available).
- A16.3.10. Applicable survival vest/kit.
- A16.3.11. Components of the survival vest/kit.
- A16.3.12. Helmet and oxygen mask.
- A16.3.13. MQ-1/COMBAT EDGE tester with oxygen supply.

A16.4. Specific Areas to be Covered:

- A16.4.1. Personnel locator beacons:
 - A16.4.1.1. Operation/capabilities/limitations.
 - A16.4.1.2. Location.
 - A16.4.1.3. Use of personnel locator beacons on the ground.

A16.4.2. Survival Radio:

A16.4.2.1. Operation/capabilities limitations.

A16.4.2.2. Antenna.

A16.4.2.3. Accessories.

A16.4.2.4. Transmit voice.

A16.4.2.5. Transmit tone.

A16.4.2.6. Malfunctions.

A16.4.3. Signal, smoke and illumination, MK-13/MK-124 Mod 0:

A16.4.3.1. Capabilities/limitations.

A16.4.3.2. Operations.

A16.4.4. A/P 25S-series signal kit:

A16.4.4.1. Capabilities/limitations.

A16.4.4.2. Operation.

A16.4.5. Mirror:

A16.4.5.1. Capabilities/limitations.

A16.4.5.2. Operation.

A16.4.6. SDU-5/E strobe light:

A16.4.6.1. Capabilities/limitations.

A16.4.6.2. Operations:

A16.4.6.2.1. Attachment and use of the IR filter/flash guard.

A16.4.7. Sea marker dye:

A16.4.7.1. Use.

A16.4.7.2. Capabilities/limitations.

A16.4.8. Whistle:

A16.4.8.1. Use.

A16.4.8.2. Capabilities/limitations.

A16.4.9. Rescue:

A16.4.9.1. Locations of nearest rescue facilities.

A16.4.9.2. Capabilities/limitations.

A16.4.9.3. Call sign, signals, tactics.

A16.4.9.4. Vectoring of rescue aircraft.

A16.4.9.5. Types, operation and use of pickup devices used by the rescue units.

- A16.4.10. Kit/vest
 - A16.4.10.1. Location of survival vest/kit components.
 - A16.4.10.2. Use of survival vest/kit components (aircrew members will demonstrate "hands-on" proficiency with vest/kit components.
 - A16.4.10.3. Preflight of the survival vest/kit.
 - A16.4.10.4. Selection and use of automatic or manual modes on kits that have an automatic deployment feature.
 - A16.4.10.5. Release of survival kit from the parachute harness in applicable situations.
- A16.4.11. Knows requirements for proper fit of the helmet and oxygen mask.
 - A16.4.11.1. Can preflight equipment on the MQ-1 tester.
 - A16.4.11.2. Understands the responsibility for proper care, periodic maintenance, preflight and post flight of the helmet and mask.
 - A16.4.11.3. Aware of the functions and the protection afforded by the helmet and oxygen mask.
- A16.4.12. Nomex gloves.
- A16.4.13. Nomex coveralls.
- A16.4.14. Aircrew boots.
- A16.4.15. Anti-G garment (if applicable).
- A16.4.16. Flight jackets.
- A16.4.17. Cold Weather Clothing Requirements (if applicable).
- A16.4.18. Anti-exposure garment (if applicable).
- A16.4.19. Specific Areas to be Covered. Ensure that each aircrew:
 - A16.4.19.1. Has a knowledge of the protection afforded by Nomex coveralls and gloves.
 - A16.4.19.2. Is aware of the minimum mandatory flight clothing as required by this regulation and other
 - applicable directives.
 - A16.4.19.3. Can don and doff the anti-exposure garment and related insulated clothing.
 - A16.4.19.4. Can perform a preflight inspection of the anti-G garment.
 - A16.4.19.5. Stress proper G Suit fit (min every 90 days) in relation to G Loss of Consciousness (GLOC).

TRAINING OUTLINE - WATER SURVIVAL TRAINING

A17.1. Objectives. To provide realistic hands-on training on the preflight, fitting, and operation of flotation equipment, including rescue procedures/devices. Each aircrew member will satisfactorily demonstrate and explain the operational features, use of all components, and rescue procedures to the unit LSO or life support personnel.

A17.2. Reference:

- A17.2.1. TOs 14P3-series, 14S-1-102, 14S1-3-51, 14S6-3-1.
- A17.2.2. A17.2.1.AFR 60-16.

A17.3. Training Aids:

- A17.3.1. Anti-exposure garment (if applicable).
- A17.3.2. Applicable life preservers.
- A17.3.3. Applicable one-man raft and accessories.
- A17.3.4. Multiplace life rafts and accessories (if applicable).
- A17.3.5. Illustrations of MA-1/2 sea rescue kit (if actual items are not available).
- A17.3.6. Rescue devices.
- A17.3.7. CD equipment (if applicable).
- A17.3.8. UET (606040DF) and HEED II (802514DN) videos (helicopter crews)

A17.4. Specific Areas to be Covered:

- A17.4.1. Anti-exposure garment (if applicable).
- A17.4.2. Fitting and adjusting the life preserver.
- A17.4.3. Removal and inflating aircraft installed rafts.
- A17.4.4. Water entry procedures.
- A17.4.5. Parachute entanglement/escape procedures.
- A17.4.6. Water drag/parachute canopy release procedures.
- A17.4.7. Raft boarding procedures.
- A17.4.8. Hazards associated with water survival.
- A17.4.9. Rescue procedures/devices:
 - A17.4.9.1. Jungle penetrator with flotation collar.
 - A17.4.9.2. Horse collar. (Not to be used with the LPU-9/P life preserver).
 - A17.4.9.3. Rescue basket.

A17.4.10. Understands the proper procedures and use of the ACDE in a water environment.

A17.4.11. Underwater egress for helicopters

A17.4.11.1. HEEDs operation

TRAINING OUTLINE LOCAL/DEPLOYING AREA SURVIVAL

A18.1. Objectives: Identify terrain, environmental conditions, natural resources, survival needs, and local/deploying area rescue procedures that will benefit or hinder an aircrew member's survival or rescue in the local operational area.

A18.2. References:

A18.2.1. AFI 36-2209, Joint Pubs 3.50.1/2 (Formerly AFM 64-2), AFR 64-3, AFR 64-4 (Volume I), AFP 64-5, and AFP 64-15.

A18.2.2. TO 00-35A-39, 14S6-3-1.

A18.3. Training Aids:

- A18.3.1. Local/deploying area photos.
- A18.3.2. Survival/vest components
- A18.3.3. Signaling devices.
- A18.3.4. Rescue devices.
- A18.3.5. Other equipment as needed.

A18.4. Specific Areas to be Covered:

- A18.4.1. Local/deploying area terrain and environmental conditions.
 - A18.4.1.1. Seasonal temperatures.
 - A18.4.1.2. Average Precipitation.
 - A18.4.1.3. Hazards.
 - A18.4.1.4. Benefits.
- A18.4.2. Personal Protection.
 - A18.4.2.1. Clothing.
 - A18.4.2.2. Shelter (equipment/natural).
- A18.4.3. Local/deploying area Terrain.
 - A18.4.3.1. Navigation.
 - A18.4.3.2. Reference points.
 - A18.4.3.3. Hazards.
 - A18.4.3.4. Benefits.
- A18.4.4. Medical.
 - A18.4.4.1. Life threatening.

A18.4.4.2. Minor medical problems.

A18.4.4.3. Self-aid.

A18.4.5. Water Sources.

A18.4.5.1. Survival kit.

A18.4.5.2. Natural (locations).

A18.4.5.3. Procurement/preparation.

A18.4.6. Local/deploying area Rescue Procedures.

A18.4.6.1. Types of rescue assets available.

A18.4.6.2. Procedures.

A18.4.6.3. Rescue devices used.

GUIDELINES FOR A STANDARDIZED LIFE SUPPORT LESSON PLAN

A19.1. Completeness.

- A19.1.1. Quick reference.
- A19.1.2. Enhances demonstration/performance instruction.
- A19.1.3. Conforms to aircraft/aircrew Dash One procedures.
- A19.1.4. Minimal technical information. Maximize procedural information (Use technical information only to reinforce procedural information).
- **A19.2.** Sets up scenario training to evaluate the aircrews capability to make a timely ejection decision.

A19.3. Order.

- A19.3.1. Step-by-Step.
- A19.3.2. Logical sequencing aligned with what the aircrew can expect if he had to utilize the system.

NOTE:

Include ACDE/procedures, where applicable.

A19.4. Easy to use.

- A19.4.1. "At a glance" reference. (Not intended for lecture).
- A19.4.2. Outline/checklist format.
- **A19.5.** All Dash One warnings and cautions must be highlighted.
- **A19.6.** Reduce redundancy. Consolidate wherever possible.

A19.7. SAMPLE LESSON PLAN

123 TFW Life Support Lesson Plan (Example of mandatory format)

LESSON PLAN: Continuation

REQUIREMENT: Semiannual (annual)

ACFT SYSTEM: (as appropriate)

SECTION I: Equipment Preflight

<u>INSTRUCTOR OVERVIEW</u> <u>AIRCREW DESIRED RESPONSES</u>

A. Helmet A1. Overall Conditions: No chips or cracks; camouflaged; of standard color/cover.

A2. Chin and Nape Straps fitted: secured.

A3. Visor: free operation; freely locks/unlocks from position.

A4. Comm connectors secured and checked on MQ-1.

B. Helmet Bag B1.Used when helmet taken out.

CAUTION: Do not store helmet in hot area (closed cockpit/auto). Heat will cause liner to expand.

WING LSO TRAINING CHECKLIST

TASK START DATE ESTIMATED COMPLETION

COMP DATE DATE

A20.1. ADMINISTRATIVE

- A20.1.1. Obtain Z prefix.
- A20.1.2. Obtain slot to AETC LSO course if not already completed.

A20.2. ORIENTATION

- A20.2.1. Briefing from departing LSO or Superintendent.
- A20.2.2. Interview with OG/CC.
- A20.2.3. Tour life support facilities and meet
- A20.2.4. Supervisors and technicians.
- A20.2.5. Visit support agencies.
 - A20.2.5.1. Egress.
 - A20.2.5.2. Fabrication and Survival Equipment.
 - A20.2.5.3. Environmental Systems.
 - A20.2.5.4. Disaster Preparedness.
 - A20.2.5.5. Maintenance Plans and Scheduling.
 - A20.2.5.6. Maintenance QA.
 - A20.2.5.7. Parachute.
- A20.2.6. Interview with flying units' CCs or Ops Officers.
- A20.2.7. Interview with MA.
- A20.2.8. Meet Maintenance Sqdn CCs and appropriate branch chiefs.

A20.3. REVIEW OF PUBLICATION AND OTHER DOCUMENTS

- A20.3.1. AFI 11-301, Air Force Life Support Program.
- A20.3.2. PACAFI 11-301, PACAF Life Support Program, and wing/NAF supplements.
- A20.3.3. Wing and Unit Operating Instructions (OIs) governing Life Support functions/agencies.
- A20.3.4. AFI 90-201, Inspection General Activities, PACAFI 90-201 (ORI) Quality Air Force Criteria (QAFA)
- A20.3.5. PACAFR 355-7, NBC Warfare Defense
- A20.3.6. Wing LSO Continuity Folder.

- A20.3.7. PACAF Self-Inspection Guide.
- A20.3.8. Staff Assistance Visit (SAV) Reports (wing and higher HQ).
- A20.3.9. QAFA/ORI Reports (home unit and crosstalk)
- A20.3.10. OPLANS.
 - A20.3.10.1. Mobility.
 - A20.3.10.2. Cope Thunder.
- A20.3.11. Host-Tenant Support Agreements.

A20.4. AIRCREW AND PASSENGER TRAINING

- A20.4.1. Review appropriate lesson plans.
- A20.4.2. Equipment checkout.
 - A20.4.2.1. Ejection Seat Trainer.
 - A20.4.2.2. Hanging Harness Trainer.
 - A20.4.2.3. Other Training Aids.
- A20.4.3. Observe classes taught by a certified trainer.
 - A20.4.3.1. Initial Egress.
 - A20.4.3.2. Refresher Egress.
 - A20.4.3.3. Passenger Egress.
 - A20.4.3.4. Water Survival.
- A20.4.4. Teach classes monitored by a certified trainer.
 - A20.4.4.1. Initial Egress.
 - A20.4.4.2. Refresher Egress.
 - A20.4.4.3. Passenger Egress.
 - A20.4.4.4. Water Survival.
 - NOTE: Complete items within 60 calendar days of appointment as wing LSO.

SQUADRON LSO TRAINING CHECKLIST

TASK START DATE ESTIMATED COMPLETION

COMP DATE DATE

A21.1. ADMINISTRATIVE

- A21.1.1. Squadron CC Letter of Appointment.
- A21.1.2. Attend the AETC LSO Mobile Training Team Course (Nov XX)

A21.2. ORIENTATION

- A21.2.1. Briefing from departing LSO or NCOIC.
- A21.2.2. Interview with Squadron CC or Ops Officer
- A21.2.3. Interview with Wing LSO.
- A21.2.4. Tour life support facilities and meet technicians.
- A21.2.5. Visit Support Agencies.
 - A21.2.5.1. Egress.
 - A21.2.5.2. Fabrication and Survival Equipment.
 - A21.2.5.3. Safety.

A21.3. REVIEW OF PUBLICATIONS AND OTHER DOCUMENTS

- A21.3.1. Squadron LSO Continuity Folder.
- A21.3.2. AFI 11-301, Air Force Life Support Program.
- A21.3.3. PACAFI 11-301, PACAF Life Support Program, and Wing AD/NAF supplements.
- A21.3.4. PACAFR 355-7, NBC Warfare Defense
- A21.3.5. Wing and Unit Operating Instructions (OIs) governing life support functions/agencies.
- A21.3.6. AFI 90-201, Inspection General Activities, PACAFI 90-201 (ORI) Quality Air Force Criteria (QAFA)
- A21.3.7. PACAF Life Support Self-Inspection Guide.
- A21.3.8. Staff Assistance Visit (SAV) Reports (Wing and HHQ).
- A21.3.9. QAFA/ORI Reports (unit and crosswalk).
- A21.3.10. OPLAN.
 - A21.3.10.1. Mobility.
 - A21.3.10.2. Cope Thunder.

A21.4. AIRCREW AND PASSENGER TRAINING

- A21.4.1. Review appropriate lesson plans.
- A21.4.2. Equipment Checkout.
 - A21.4.2.1. Ejection Seat Trainer
 - A21.4.2.2. Hanging Harness Trainer
 - A21.4.2.3. Other Training AIDS
- A21.4.3. Observe classes taught by a certified trainer.
 - A21.4.3.1. Initial Egress
 - A21.4.3.2. Refresher Egress
 - A21.4.3.3. Passenger Egress
 - A21.4.3.4. Water Survival
- A21.4.4. Teach classes monitored by a certified trainer.
 - A21.4.4.1. Initial Egress
 - A21.4.4.2. Refresher Egress
 - A21.4.4.3. Passenger Egress
 - A21.4.4.4. Water Survival

NOTE:

Complete items within 60 calendar days of appointment as LSO